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Auditor General
Victoria

Non-metropolitan urban water authorities

Enhancing performance and accountability

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The President
The Speaker
Parliament House
Melbourne Vic. 3002

Sir

Under the provisions of section 16 of the *Audit Act* 1994, I transmit my performance audit Report on *Non-metropolitan urban water authorities: Enhancing performance and accountability.*

Yours faithfully

J.W. CAMERON
Auditor-General

Contents

Foreword

Essential services by their very nature are of crucial significance to the community, business and industry. Water and wastewater services, that fall into this category, need to be managed well by water authorities if quality outcomes in terms of public health, economic development and protection of the environment are to be achieved in a cost-effective manner.

Our examination of water management practices employed by Victoria's non-metropolitan urban water authorities involved:

- the identification of a suite of performance objectives, the key drivers of efficient and effective performance, constraints faced by water authorities and associated recommendations, and the development of a framework of good practices together with relevant examples; and
- an assessment of the appropriateness, accuracy and completeness of the performance information reported to the Parliament and the community, together with a series of recommendations to strengthen the accountability regime.

In recognising the precious nature of water as a community resource and its importance to all Victorians, the findings of this audit are presented to complement the various initiatives already underway. Our aim is to enhance performance and accountability within the non–metropolitan urban water sector which provides services to around 1.5 million Victorians.

It is my belief that the material included in this Report should assist in the promotion and dissemination of good practice with a consequential performance payback, not only across regional water authorities, but throughout other service industries.

J.W. CAMERON
Auditor-General

November 2000

Part 1

Executive summary

AUDIT OBJECTIVES AND SCOPE

1.1 This performance audit covered Victoria's 15 non-metropolitan urban water authorities and focused on the following performance areas:

- customer service;
- water management;
- environmental management;
- commercial practices; and
- corporate governance.

1.2 The audit:

- identifies the key drivers and constraints affecting performance in terms of efficiency and effectiveness;
- develops a framework of good practices, suitable for use by non-metropolitan urban water authorities and, to some extent, other public sector bodies, that could contribute to enhancing performance; and
- provides assurance as to the appropriateness, accuracy and completeness of performance information reported to the Parliament and the community.

1.3 The audit was not designed to evaluate the performance of any particular non–metropolitan urban water authority and, as such, identification of practices that could be improved in any specific authority was not within the scope of the audit. Rather, it was designed to assist the non–metropolitan urban water industry improve its performance by developing a framework of good practices that can be shared across the industry. In doing so, we recognise that all of the good practices described in the Framework of Good Practices contained in this Report may not be applicable to all authorities. The applicability of practices will vary and be dependent on an individual authority's regional circumstances, attitude and capacity to implement practices. However, in general, most of the practices would be widely applicable throughout the industry.

AUDIT FINDINGS

1.4 Across Victoria, the non-metropolitan urban water authorities operate in diverse climatic, geological and geographical conditions, and serve populations and communities that differ in their geographical distribution and total number. These factors result in authorities that range considerably in size, number of employees, technical capability, type and level of service, customer expectations, raw water availability and water quality. This diversity, which creates challenges in comparing and analysing the performance of authorities, has been taken into account in the conduct of the audit. ***(para. 3.7)***

Performance drivers and constraints

1.5 The key drivers impacting on efficient and effective performance of a water authority are those within their direct control. These drivers include authorities adopting a customer and stakeholder focus, with a commitment to innovation and continuous improvement. Other drivers include a contributory leadership style, whereby staff are involved in corporate planning processes and open communication occurs at all levels, and a commitment to risk management and consultation. The converse of these drivers inhibit performance. The main external driver of performance was found to be requirements imposed by government addressing areas such as drinking water quality and environmental requirements. ***(para. 3.19)***

1.6 Potential constraints that affect performance were evident. These constraints were largely external and, accordingly, authorities have little control over them. The constraints include:

- The absence of guidance on the rates of return on assets that should be earned by non-metropolitan urban water authorities which sends incorrect price signals that discourages efficient outcomes (***para. 3.49)***;
- Pricing discrimination in raw water in favour of irrigators over non-metropolitan urban water authorities, whereby water from the same source is more expensive for non-metropolitan urban water authorities than for irrigators (***para. 3.50)***;
- Confusion and lack of clarity in the regulatory regime under which authorities operate (***para. 3.51)***;
- Self-protective behaviour resulting from concerns about future industry restructuring that inhibits co-operation. Where co-operation has been achieved, financial savings, technical innovation and better system risk management have resulted (***paras 3.52 to 3.53)***;
- Little financial incentive for authorities to practise water conservation. Revenue is tied to the amount of water sold and reduced usage will, at least in the short to medium-term, reduce the financial performance of an authority (***para. 3.54)***;
- Authorities collectively forming a monopoly industry, with few demonstrated competitive drivers. However, the voluntary performance comparison information produced by water industry associations and the reportable performance indicators required by the Department of Natural Resources and Environment provide information that enables some competitive comparison among authorities (***paras 3.55 to 3.58)***; and
- Generally, non-metropolitan urban water authorities bearing the responsibility of cleansing raw water of contaminants and pathogens resulting from upstream activities (***para. 3.59).***

Framework of Good Practices

1.7 We have developed a Framework of Good Practices for use by non-metropolitan urban water authorities and other relevant public entities as a tool to assist with improving their overall performance. The Framework, which shares information in relation to management practices, should ultimately be of benefit to all stakeholders. ***(paras 4.7 to 4.14)***

Appropriateness of reported performance indicators

1.8 In assessing the appropriateness of reported performance indicators that non-metropolitan urban water authorities are required to report to the Parliament, it was evident that:

- the reported performance indicators are not sufficiently comprehensive to meet the requirements of key stakeholders;
- for individual indicators, all are appropriate in terms of the relevance of their respective formulae, except for the Movement in Real Service Prices Indicator; and
- some reported performance indicators require clearer definitions, such as the indicators for Waste Management for Wastewater, and Long-Term Profitability. (***para. 5.18)***

Accuracy and completeness of reported performance indicators

1.9 An audit was conducted of the performance indicators reported by the Victorian non–metropolitan urban water authorities for the financial year ended 30 June 1999 to determine their accuracy and completeness. The aim of the audit was to form an opinion across the entire sector rather than to reach a conclusion at an individual authority level. (***paras 6.2 to 6.5)***

1.10 The primary reason for the inaccuracies within the reported performance indicators was the misinterpretation of indicator definitions. (***para. 6.23)***

1.11 Based on the audit, the level of assurance on a Statewide basis that can be placed on:

- the completeness of the reported performance indicators is high; and
- the accuracy of the reported performance indicators is low. (***para. 6.38)***

RECOMMENDATIONS

1.12 We note that the Government is currently pursuing a number of initiatives that may address some of the recommendations outlined in this Report. A list of these recommendations contained throughout the Report is set out below.

Report reference	*Paragraph number*	*Recommendation*
Drivers of good performance	3.64	Non-metropolitan urban water authorities should continue to foster an internal structure and culture that encourages a customer and stakeholder focus together with a commitment to innovation, continuous improvement, consultation and risk management. Performance can be further driven if the organisational culture includes a contributory leadership style of management that values staff involvement.
Pricing	3.65	To obtain the appropriate economic outcomes throughout the water industry, pricing should reflect costs. Transparent subsidies can then be applied to those towns and industries that the Government might want to support. The Department of Natural Resources and Environment, as the responsible authority, should develop consistent pricing guidelines across the water industry.
Water conservation	3.66	The introduction of water conservation requirements for non-metropolitan urban water authorities, within an appropriate regulatory regime, should be considered. Considerable scope exists to encourage and require more active water conservation measures to reduce both future infrastructure requirements and impact on the environment.
Trade waste discharged to sewers	3.67	Consideration should be given by the Government to improving consistency and control of trade waste discharged to sewers and regulating liability for damage caused by those discharging waste.
Water quality	3.68	The Government should improve the accountability, responsibility, regulation and governance of raw water quality with the objective of aligning responsibilities to those parties that influence or control activities impacting on raw water quality.
Co-operation among non-metropolitan urban water authorities	3.69	Non-metropolitan urban water authorities and the Department of Natural Resources and Environment should foster further co-operation among authorities where benefits can be derived. This co-operation can be enhanced by the Government promulgating its policy on industry structure to provide increased certainty for individual non-metropolitan urban water authorities.
Competition	3.70	Within the scope of government policy, consideration should be given to encouraging greater competition within the industry to enhance performance. This could be achieved through increasing competition by comparison and harnessing competitive forces when purchasing.
	3.71	While we acknowledge that the recommendations surrounding further co-operation and enhanced competition are potentially in conflict, both can contribute to improved performance. We envisage that an appropriate balance could be reached in relation to co-operation and competition with the objective of optimising performance.

Report reference	*Paragraph number*	*Recommendation*
Performance indicators – appropriateness	5.19	The Department of Natural Resources and Environment should develop a more appropriate set of external reported performance indicators to accurately reflect stakeholder requirements, while taking into account the needs of the non-metropolitan urban water authorities;
Performance indicators – accuracy and completeness	6.39	The Department of Natural Resources and Environment should: • Reduce the risk of misinterpretation of the reportable performance indicators by including greater prescription in the way in which definitions are to be applied, improving definitions of data to be used in calculations and providing worked examples; and
	6.45	• Introduce an audit regime to ensure that publicly reported performance indicators are calculated in accordance with the definitions and are accurate and complete. In terms of the external financial statement audit, recent amendments to the *Audit Act* 1994 provide me with the power to audit reported performance indicators in terms of whether they are relevant to any stated objectives of an authority, are appropriate for the assessment of actual performance and fairly represent actual performance. Consideration will be given to applying this power on an annual basis to the non-metropolitan urban water industry.
	6.40	A co-operative project should be undertaken by the non-metropolitan urban water authorities to develop a standard system for recording and reporting performance information. This should specifically include systems for recording customer interruptions, spills, scheduling of samples and result recording. Alternatively, if a good system exists within a particular authority, this should be made available to all authorities.
	6.41	Non-metropolitan urban water authorities should review and, where necessary, improve the adequacy of their procedures currently in place for gathering non-financial performance data, along with the completion of calculations and reporting of results. This should include, but not be limited to, a review of: • management of source documentation and records; • data accuracy and completeness (including data entry); • timeliness of data entry/capture; • procedures for indicator calculation; • accountabilities; • maintenance of calculation records (prior periods) to ensure consistency; and • periodic reporting to management, the Board and stakeholders.
	6.42	Non-metropolitan urban water authorities should implement procedures for independent review and approval of reported performance indicators. Indicator calculations should be checked by personnel independent of those preparing calculations. All reported performance indicators should be approved prior to incorporation in the annual report and adequate documentation should be maintained for indicator calculations.

Report reference	*Paragraph number*	*Recommendation*
Performance indicators – accuracy and completeness - *continued*	6.43	Non-metropolitan urban water authorities should endeavour to integrate performance indicator preparation with existing financial statement completion processes. This would include reconciliation and approval of calculations and the generating of one set of reported performance indicators. Integration of reporting processes would better facilitate timely and accurate reporting of results.
	6.44	The annual report of each non-metropolitan urban water authority should contain a statement explaining that the reported performance indicators have not been audited or the level to which they have been independently audited.

RESPONSE *provided by Secretary, Department of Natural Resources and Environment*

General comment

The recommendations in the Report are generally supported. They provide a valuable set of best practice guidelines for enhancing the internal drivers of the non-metropolitan urban water authorities (NMUs) and should be of significant use in improving the overall performance of the industry.

Drivers of good performance

DNRE agrees with the Report.

Community consultation is a high priority of the Government and the Minister for Environment and Conservation. A current initiative is improving processes for communication between water businesses and the wider communities which they impact, and working together with the communities to achieve solutions. Community consultation and engagement ensures that the decision-making processes of water businesses, as government-owned utilities, is open and transparent.

The Government's expectations of NMUs, and authorities' obligations and accountabilities in relation to the provision of those services to their customers, will soon be made explicit in Water Services Agreements. The first generation Water Services Agreements are currently being drafted by the Department of Natural Resources and Environment (DNRE) and the NMUs, and are expected to be finalised before the end of the 2000-01 financial year.

Pricing

The 1997 and 1998-99 price reviews of the urban water businesses in Victoria resulted in a price freeze for urban water customers, which will end on 30 June 2001. DNRE is undertaking a price review for 2001 and beyond, to establish a robust and transparent process for determining new prices to apply from 1 July 2001, for water, sewerage and drainage services. In September this year, an issues paper, titled "2001 Price Review of Water, Drainage and Sewerage Services in Victoria" was released by DNRE for public consultation, and for discussion with the water businesses. This is being followed by a series of workshops in metropolitan and regional Victoria in October-November 2000. The price review will take on board the comments raised in the Report.

***RESPONSE** provided by Secretary, Department of Natural Resources and Environment - continued*

Water conservation

As part of the 2000-2001 corporate planning directions issued by the Minister, each NMU was required to prepare a water conservation strategy. While the metropolitan water businesses have been required to prepare water conservation plans as part of their licence requirements, NMUs have not been requested to do this prior to this year. These strategies will become part of the Water Services Agreements currently being developed in partnership with NMUs.

In addition the Minister has approved 3 Statewide water conservation initiatives that will strengthen the awareness, management and innovation in water conservation. The initiatives are:

- *a Statewide education campaign;*
- *active management and goal setting; and*
- *establishment of a Water Conservation Council.*

These initiatives will create a high level of awareness of the current water situation and the need to save water and establish clarity on roles, responsibilities and targets for water authorities and businesses. It will also focus the Victorian community on using water more efficiently and effectively, and ensure that water conservation matters and security of supply are made transparent with government water businesses.

Trade waste discharged to sewers

Some inconsistency between trade waste agreements used by various water authorities is in order because of differences in discharge licence requirements that exist at various treatment plants. However, it is agreed that there is some scope for improving management of trade waste. The existing regulatory tools are considered satisfactory for the task but they could be used more effectively across the industry. Before looking at any possible changes to liability, it will be important to get a better understanding of the problems to be addressed in this area.

Water quality

Areas that have the potential for significant impact on water quality include catchment management, incident management (for example, blue-green algal outbreaks), and reservoir and source water management. Catchment management authorities, DNRE, local government and rural water authorities all play an important role in providing assurance to NMUs that risks to water quality are suitably managed. The roles have been recognised in the "A New Regulatory Framework for Drinking Water Quality in Victoria Consultation Paper" developed by DNRE and the Department of Human Services which was released by the Minister for Environment and Conservation on 24 August 2000.

The consultation paper advocates adoption of a holistic approach in delivery of drinking water that considers all impacting factors from the water supply catchment to the consumers' tap. The ability for the water authority to ensure an ongoing supply of good quality drinking water is very much influenced by the raw water received at the treatment plant. The paper proposes the establishment of clear roles and responsibilities for the stakeholders involved in the water delivery chain to ensure that potential risks are suitably identified and managed. Risk management plans identifying the potential risks to raw water quality, and independent third party audits are proposed to ensure implementation. Responses to the consultation paper closed on 13 October 2000 and they are currently under consideration.

In addition, the Environmental Protection Authority is undertaking a review of the "State Environment Protection Policy, Waters of Victoria" and DNRE is preparing a River Health Strategy. These initiatives will further support management of raw water quality.

***RESPONSE** provided by Secretary, Department of Natural Resources and Environment - continued*

Co-operation between non-metropolitan urban water authorities

There are a number of cooperative arrangements currently within the NMU sector. For example, NMUs in south-west Victoria are working closely together in a number of areas (for example, human resources, biosolids and a regional grid system) in a resource sharing arrangement. South West Water, Portland Coast Water and Glenelg Water have a cross membership arrangement where the Chairperson of each Board is also a member on the other 2 Boards. The arrangements are aimed at promoting co-operation and improving services and benefits to customers.

Another example is with the Gippsland NMUs where arrangements for some resource sharing exist. DNRE plans to actively promote co-operative arrangements between NMUs which lead to customer benefits.

Competition

The concept of enhancing competition by comparison will be considered in the context of the overriding regulatory framework currently being developed by DNRE for the water industry.

Performance indicators

DNRE fully agrees with the Report that reported performance indicators (RPIs) need to be relevant and that RPIs are accurate. DNRE is currently reviewing RPIs for NMUs. Customer complaint indicators were introduced for the first time for NMU corporate planning for 2000-01 to gauge customer feedback on services provided by NMUs. Definitions for these customer complaints indicators were consistent with the Office of the Regulator General's to provide some feedback to stakeholders, but primarily, information back to water businesses to drive improvements within the organisations. These indicators will be part of the NMUs' annual reporting. DNRE will continue to review other RPIs and take on board comments highlighted in the Report.

***RESPONSE** provided by Chief Executive, Goulburn Valley Water*

General comment

I should say initially that the Report makes a genuine effort to propose a framework of good practices for the management of NMUs. This framework provides a useful checklist of management practices that a well performing water authority should be addressing.

The Report makes some interesting observations, and provides insight into issues that are of concern to the NMUs. These include the lack of direction in respect to a rate of return on assets, pricing discrimination in raw water supply, and the need for more pro-active and timely input from DNRE into business planning processes.

Concerns

The Report concludes that the accuracy of the reported performance indicators (RPIs) for the NMUs is low. While the project team leader conceded in discussions following the release of the first draft that Goulburn Valley Water is one of the better performing authorities in this regard, the recommendation across the sector is nevertheless the same for all, i.e. low.

Any general conclusion of this nature is of concern because it applies the lowest common denominator to all authorities and does not provide properly segmented or qualified data upon which to develop solutions.

The major residual concern about the process of developing this Report is the subjective method of collecting, analysing and reporting data about the drivers of good performance.

*It is our view that this Report should have focused upon those innovations and model processes which could be readily scaled-up and leveraged across the sector to make **significant** gains in customer service delivery and environmental outcomes. We believe the Report falls short of the mark in that respect.*

Part 2

Background

WATER INDUSTRY REFORM

2.1 The provision of water and wastewater (sewerage) services is the responsibility of the Victorian Government.

2.2 The water industry in Victoria has undergone major change over the last 18 years with the intention of increasing efficiency and operational performance, while optimising services provided to customers. The reforms have resulted in progressive restructuring of the industry. In 1982 there were over 400 water authorities, but by 1993 the authorities had been rationalised to approximately 140.

2.3 In 1994, the Victorian Government further amalgamated Victoria's non-metropolitan water authorities to create the 15 non-metropolitan urban water authorities (NMUs) that exist today. In January 1995, Melbourne Water was split into 3 distribution and retail entities, namely, Parks and Waterways (Parks Victoria) and one wholesale body.

2.4 Catchment Management Authorities (CMAs) were established on 1 July 1997 with the aim of creating a “whole-of-catchment” approach to natural resource management. The CMAs combined the roles of the former river management boards, catchment and land protection boards, and community-based advisory groups such as salinity plan implementation groups and water quality working groups.

2.5 On 1 January 1998, the Government reduced overall prices of water and wastewater services to residential customers by an average of 18 per cent across Victoria. To achieve this price reduction, the Government allocated special grants totalling $410 million to the NMUs to reduce debt and fund specified capital works to improve drinking water quality and wastewater discharge quality. Prices have been frozen since 1 January 1998 and this freeze extends until 30 June 2001.

Structure of the water industry in Victoria

2.6 Today, the Victorian water industry is separated into 5 categories of operational water businesses:

- Catchment management authorities - There are 9 catchment management authorities covering the non-metropolitan regions of Victoria. In addition, the catchment areas servicing the Melbourne metropolitan area are managed by Melbourne Water and the Port Philip Catchment and Land Protection Board. Catchment management authorities are responsible for the management of the land and waterway environments;
- Metropolitan Wholesale Water - Melbourne Water is the wholesaler of water to the metropolitan retail and distribution authorities, and is responsible for the bulk collection and treatment of the majority of Melbourne's wastewater;
- Metropolitan distribution and water retail authorities - There are 3 metropolitan distribution and retail authorities that operate the water distribution and wastewater collection systems for the Melbourne metropolitan area;
- Rural water authorities - There are 4 rural water authorities and one irrigation trust that provide a range of services such as farm irrigation, stock water supply and the wholesale supply of water to some non-metropolitan urban water authorities; and

- Non-Metropolitan Urban Water Authorities - There are 15 non-metropolitan urban water authorities in Victoria which service all regional urban centres providing water and wastewater services. Some NMUs manage a proportion of their raw water resources.

Non-metropolitan urban water authorities

2.7 The non-metropolitan urban water authorities (NMUs) cover non-metropolitan Victoria. Chart 2A shows the geographical area covered by each NMU and the area serviced by the metropolitan retail and distribution authorities.

CHART 2A
VICTORIA'S NON-METROPOLITAN URBAN WATER AUTHORITIES

1	East Gippsland Water	**12**	Coliban Water
2	North East Region Water	**13**	Central Highlands Water
3	Gippsland Water	**14**	South West Water
4	South Gippsland Water	**15**	Portland Coast
5	Westernport Water	**16**	Glenelg Water
9	Goulburn Valley Water	**17**	Grampians Water
10	Western Water	**18**	Lower Murray Water
11	Barwon Water		

Note: 6,7 and 8 are Melbourne metropolitan water authorities.

2.8 The NMUs provide water and/or wastewater services to over 540 000 properties across regional Victoria and generate revenues of approximately $340 million a year. They directly employ approximately 1 500 people. In addition, there are significant numbers of persons employed indirectly through provision of contracted services such as design and construction.

2.9 The 15 NMUs vary considerably in many aspects of their operations and size. Table 2B ranks the NMUs by total revenue.

TABLE 2B
NMUs RANKED BY REVENUE

	Non-metropolitan urban water authorities	*Total revenue 1998-99*	*Properties supplied*	*Wastewater collected*
		($m)	*(000's)*	*(gigalitres)*
1	Barwon Water	62	108	20
2	Gippsland Water	39	55	20
3	Central Highlands Water	39	57	11
4	Coliban Water	35	58	9
5	Goulburn Valley Water	29	49	16
6	Western Water	22	38	7
7	North East Region Water	22	37	9
8	Grampians Water	21	29	5
9	Lower Murray Water	19	26	5
10	South West Water	14	21	5
11	East Gippsland Water	11	17	2
12	South Gippsland Water	9	16	3
13	Westernport Water	7	14	1
14	Glenelg Water	5	8	1
15	Portland Coast Water	5	8	2
	Total	**339**	**541**	**116**

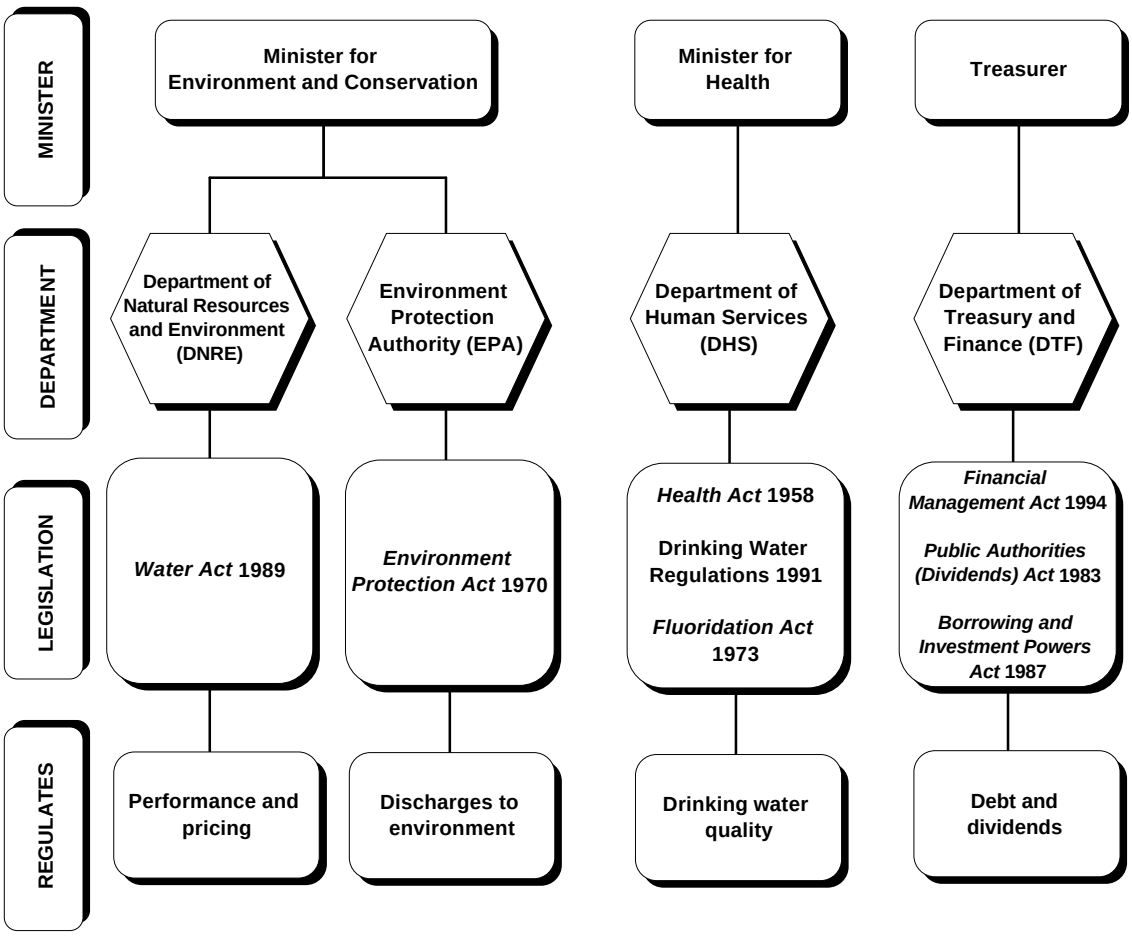
Regulatory framework

2.10 The NMUs are statutory authorities under the *Water Act* 1989 and the Minister for Environment and Conservation is primarily responsible for the Victorian water industry, including the NMU sector.

2.11 The NMUs have independent Boards appointed by the Minister for Environment and Conservation. The respective Boards appoint the Chief Executive Officers of the NMUs in accordance with government guidelines.

2.12 The regulatory framework under which the NMUs operate comprises arrangements under the auspices of 3 Ministers and 4 government bodies as set out in Chart 2C.

CHART 2C
REGULATORY FRAMEWORK APPLICABLE TO NMUs



2.13 The Department of Natural Resources and Environment (DNRE) oversees the NMUs. This encompasses approval of annual business plans and monitoring performance against those plans; reviewing and setting prices; monitoring performance against prescribed performance indicators; and managing compliance with the *Water Act* 1989. DNRE promulgate Corporate Planning Guidelines annually to facilitate this NMU oversight.

2.14 Each year, the Victorian NMUs are required under a Ministerial Direction (issued on 11 July 1995) to provide a performance report as part of the report of operations in their annual report. The report is to include 12 reported performance indicators (RPIs). The NMUs are required to report the target specified for each indicator as per the NMUs' business plan, actual performance achieved for the year and the variance in percentage terms.The RPIs are:

- Long-term profitability
- Owner's investment
- Long-term financial viability
- Liquidity and debt servicing
- Movement in real service prices
- Operating efficiency
- Reliability of supply
- Reliability of wastewater collections services
- Bacteriological quality of potable water
- Physico-chemical quality of water
- Quality of wastewater disposal
- Waste management for wastewater

2.15 There is also a Memorandum of Understanding (MOU) for each NMU that sets out specific responsibilities. DNRE administers the MOU arrangements and is currently developing Water Service Agreements for each of the NMUs.

2.16 The Environment Protection Authority (EPA) has oversight for water industry environment compliance under the *Environment Protection Act* 1970. This covers discharges to waterways, oceans and land. It also includes air and noise pollution. The EPA regulates NMUs through the issue of operating licences for wastewater treatment plant discharges.

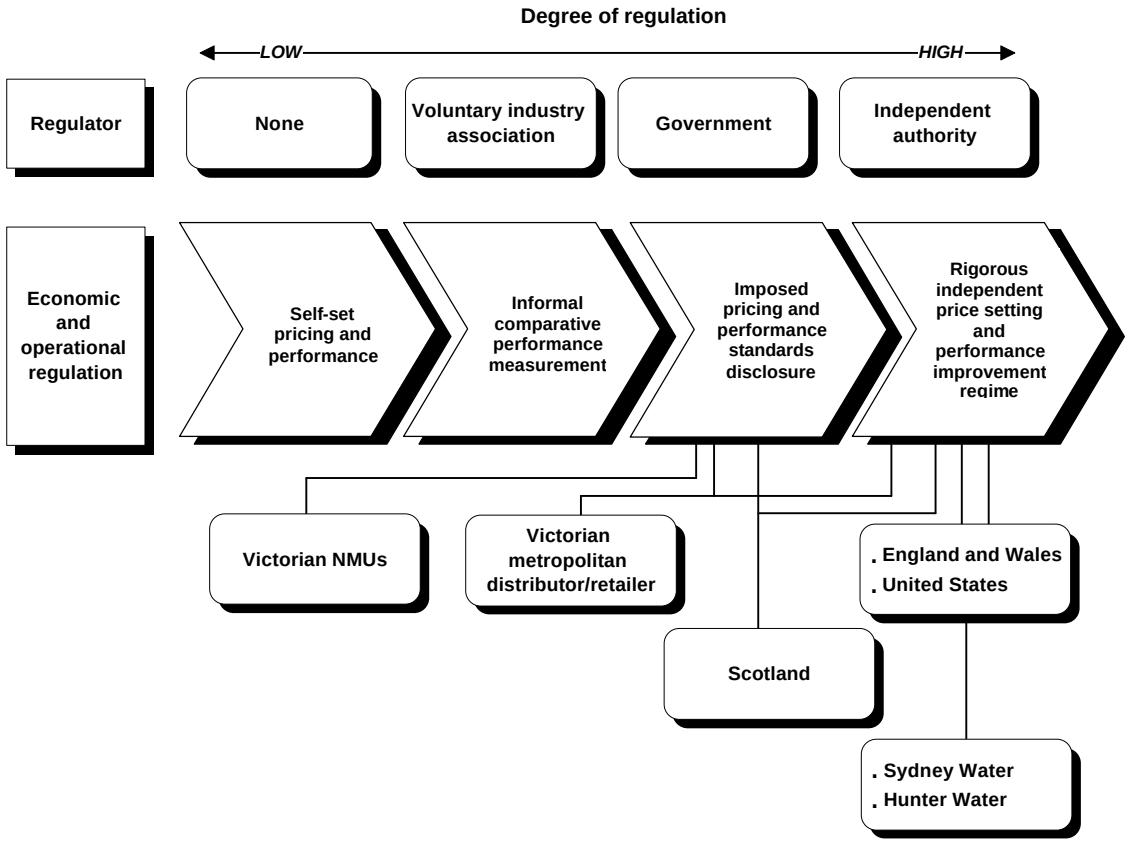
2.17 The Department of Human Services (DHS) is responsible for regulating the NMUs in relation to the health aspects of drinking water under the *Health Act* 1958, the Health (Quality of Drinking Water) Regulations 1991 and the *Fluoridation Act* 1973. The DHS also administers the payment of concessional benefits.

2.18 The Department of Treasury and Finance (DTF) sets borrowing levels, dividend policies and financial matters (such as the approval of projects exceeding $5 million) under the *Public Authorities (Dividends)* Act 1983, the *Borrowing and Investment Powers* Act 1987 and the *Financial Management Act* 1994.

2.19 The regulation of the NMUs differs from the regulation of the metropolitan water authorities in that the Office of the Regulator General (ORG) has jurisdiction over the 3 metropolitan distribution and water retail authorities in relation to licensing and customer service performance, and has no such jurisdiction over the NMUs. Licensing is not applied to the NMUs and customer service performance is monitored by DNRE. A further difference in the regulatory framework is that each NMU is required to report to Parliament annually against prescribed performance indicators.

2.20 Compared with some other regulatory frameworks operating throughout the world, the Victorian non-metropolitan urban water industry is moderately regulated. A continuum of regulatory degree is shown in Chart 2D.

CHART 2D
REGULATORY FRAMEWORK CONTINUUM



Current reform initiatives

2.21 The Government is currently pursuing several reform initiatives that will impact on the NMUs. These include dispute resolution provisions; establishment of an Essential Services Commission; review of water legislation to reflect National Competition Policy; a new regulatory framework for drinking water quality; and the development of a pricing framework. These initiatives, as at 1 October 2000, are outlined in *Appendix D: Government reviews in progress.*

Part 3

Drivers and constraints impacting on efficient and effective performance

INTRODUCTION

3.1 The first objective of the performance audit was to determine and substantiate the drivers and constraints of non-metropolitan urban water authority (NMU) performance in terms of efficiency and effectiveness in the provision of water and wastewater services, and in meeting associated obligations.

3.2 The audit did not set out to directly assess the efficiency and effectiveness of the technical, operational and financial performance of the various NMUs although, where appropriate, comparative analyses were made.

3.3 "Efficiency" was defined as optimising resource allocation in the provision of water and wastewater services, and in meeting associated obligations.

3.4 "Effectiveness" was defined as achievement in the delivery of water and wastewater services and associated obligations towards the objectives set by the Government or agency. Some standards were explicit such as the DHS bacteriological quality of drinking water, while other standards were based on normal good business practice such as exercising appropriate risk management.

3.5 The method adopted to determine and substantiate the performance drivers and constraints was:

- development of a generic set of key functions necessary for the delivery of water and wastewater services and associated obligations;
- categorisation of these functions into key performance areas;
- establishment of performance objectives for each key performance area;
- identification of performance and relative performance of NMUs, as applicable, against performance objectives; and
- determination and substantiation of the drivers and constraints affecting the efficient and effective achievement of the performance objectives.

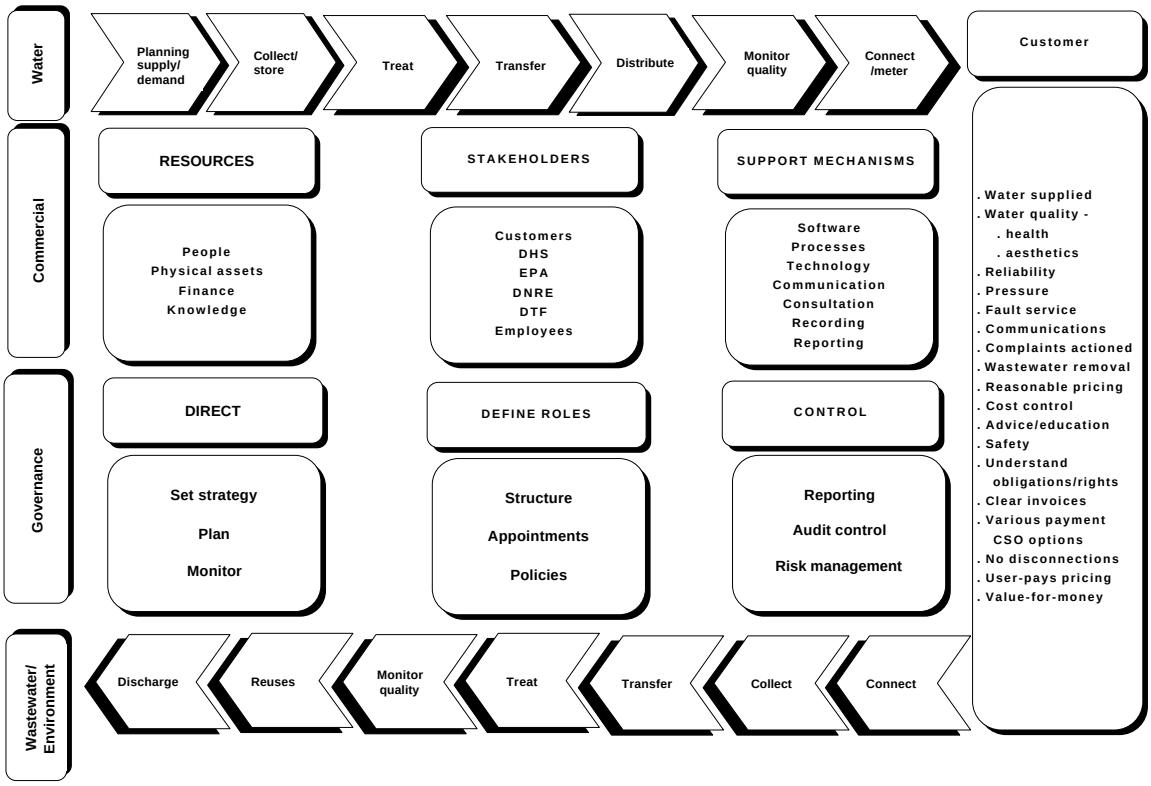
3.6 The performance of the NMUs against the performance objectives was assessed by examining publicly available performance information and site visit assessments against normative standards. An overview of the audit approach is set out in *Appendix A: Conduct of the audit.*

PERFORMANCE AREAS

3.7 Across Victoria, the NMUs operate in diverse climatic, geological and geographic conditions, and serve populations that differ in their geographical distribution and total number. These factors result in NMUs that range considerably in size, number of employees, technical capability, type and level of service, customer expectations, raw water availability and water quality. This diversity has been taken into account in developing the methodology for assessing performance, which is based on a generic functionality map applicable to all of the NMUs.

3.8 The objective was to identify the common functionality applicable to each of the NMUs and the common outcomes required in the provision of water and wastewater services. The map reflects, at a generic level, that the NMUs need to procure and manage resources and meet various stakeholder requirements in conducting their business. Chart 3A depicts a functionality map for NMUs.

CHART 3A
NMU FUNCTIONALITY MAP



3.9 This NMU functionalisty map sets out the activities that NMUs conduct and manage in relation to water collection through to delivery to customers, and collection of customers' wastewater through to treatment and discharge or reuse.

3.10 The functionality map also lists the common obligations of NMUs in relation to customers and identifies the resources, stakeholders and support mechanisms required to be organised and managed. The functionality map also encapsulates the primary and common corporate governance functions required of NMUs.

3.11 As depicted in the functionality map, there are 5 performance areas, namely:

- **Customer service** - covers understanding customer needs and obligations, and delivery and monitoring of services against those needs;
- **Water management** - covers the supply/demand planning, and the collection, processing and delivery of water to customers;
- **Environmental management** - includes the collection of wastewater and processing it in a form suitable to discharge to the environment, or for reuse;
- **Commercial practices** - includes the procurement and application of resources and support mechanisms to achieve stakeholder requirements and meet customer needs; and
- **Corporate governance** - encapsulates the setting of direction, monitoring of progress, establishment of policies and management of risks.

PERFORMANCE OBJECTIVES

3.12 Performance objectives have been established by audit in conjunction with the NMUs for each of the 5 performance areas. These objectives describe the key target outcomes in each performance area and were developed as the basis for analysing actual performance.

3.13 The performance objectives for each performance area are detailed below with a short rationale for their inclusion.

Customer service

• **Understanding of customer service obligations and NMU rights**	NMUs have statutory obligations and rights in relation to the provision of water and wastewater services to customers that need to be clearly understood in order to be met.
• **Customer access to information on their obligations and rights**	Customers should have access to information explaining their rights and obligations.
• **Provision of services that comply with obligations and are commercially responsive to customer needs**	NMU services provided to customers need to meet the minimum standards required by government. If commercially and operationally viable, it is desirable that higher levels of customer needs also be met through service provision.
• **Continuous improvement in delivery of customer services**	Stakeholders expect NMUs to determine and implement better ways of performing business activities, including delivery of customer services.

Water management

• **Deliver drinking water in accordance with government requirements for public health and safety**	Provision of safe water is a statutory obligation for NMUs.
• **Meet standards for water aesthetics (taste, colour and odour) that have been developed in consultation with customers**	Currently there are no statutory obligations in relation to water taste, colour and odour. However, water aesthetics is a prime contributor to customer satisfaction, and standards of aesthetics developed with customers will contribute to customer satisfaction.
• **Balance future supply and demand requirements for water and treated wastewater in an ecologically sustainable manner**	Medium and long-term management of water resources to meet community needs in an ecologically sustainable way is a prime requirement of NMUs.
• **Promote efficient use of water by customers**	Informing and educating customers on ways to conserve water is a requirement of many customers, the wider community and the Government.
• **Minimise system water losses**	The minimisation of losses contributes to financial efficiency and water conservation.
• **Maintain system pressure to supply short-term demand**	Adequate flow to customers and emergency services is required.

Environmental management

• **Discharge to the environment or reuse wastewater and its by-products (biosolids, gas, odour and noise) in accordance with government requirements**	The meeting of EPA wastewater treatment licence requirements is a statutory obligation of NMUs.
• **Increase level of reuse**	EPA wastewater treatment licences require NMUs to maximise reuse of treated wastewater and by-products, including biosolids and combustible gases.
• **Minimise wastewater system overflows and their environmental impacts**	In order to protect the environment and the community, wastewater overflows should be minimised and managed.
• **Maintain environmental flows**	Under bulk entitlement arrangements, approximately half of the NMUs manage environmental water flows from dams. Maintenance of environmental flows is a critical statutory obligation for the protection of downstream ecological systems.
• **Manage trade waste to protect NMU systems, the environment and the quality of treated wastewater for reuse**	Uncontrolled trade waste has the potential to significantly damage NMU system assets, pollute the environment, create health risks, affect the quality of treated wastewater and by-products for reuse and create major clean-up costs.

Commercial practice

• **Maintain financial viability**	NMUs need to be financially viable in order to meet their cash obligations in relation to operations, capital investment, debt servicing and dividend requirements.
• **Maintain service delivery assets to optimise their useful economic life**	To achieve economic efficiency in the context of meeting customer service and environmental obligations, asset utilisation needs to be optimised.
• **Implement pricing policies based on cost-reflective user-pays principles**	Pricing that reflects the cost of service is required to provide appropriate signals to users to achieve optimal economic resource allocation. Any subsidies provided should be transparent to the authority, the community and customer.
• **Provide an appropriate return to shareholders**	The return on equity in the form of the dividend that the shareholder (government) specifies and communicates should be met.
• **Optimise future capital projects in relation to supporting growth and meeting economic and environmental requirements**	Allocation and use of capital resources needs to be efficiently deployed with due regard and care for the environment.
• **Access to required knowledge, expertise and skills**	NMUs need to be able to access technical and other knowledge, and utilise expertise and skills to efficiently and safely conduct business activities.

Corporate governance

• **Board sets strategic direction, approves business plans and monitors performance**	The strategic direction of NMUs needs to be clearly established by the Board, and progress of the NMU towards achieving planned results monitored.
• **Board establishes policies in relation to all key facets of NMU operations**	The boundaries of activity, authority and accountability need to be clearly established and communicated within the organisation to ensure NMU operations are conducted in accordance with Board requirements.
• **Board establishes systems of control to minimise the potential for waste, fraud and corruption**	Systems and processes need to be in place to minimise scope for unethical practices, and protect assets of NMUs and shareholder equity.
• **Stakeholder views considered in relation to major change and initiatives**	To optimise outcomes and efficiencies, key decisions should only be made after due regard to the views of stakeholders.
• **Provide appropriate reports to stakeholders**	The NMUs have mandatory requirements for reporting to various government stakeholders, including financial, environmental and health reporting. In addition, other stakeholders such as customers and interest groups are receptive to appropriate reporting.
• **Manage strategic and operational risks appropriately**	NMUs should actively determine and set their risk levels to optimise their commercial activities and statutory obligations, having regard to their ability to bear risk.

KEY DRIVERS

3.14 Key drivers of efficient and effective performance have been identified by determining, through site visits, the attributes contributing to good performance.

3.15 Good performance at NMUs was determined by reference to the performance objectives and by comparing the NMUs using the relevant available performance indicators. The scope of this audit did not include performing a benchmarking exercise.

3.16 The available published performance indicators for 1998-99 were examined to obtain an indicative ranking of authorities in particular areas. This included the reported performance indicators from NMU annual reports and information published by the Victorian Water Industry Association Inc. (Vic Water). This was the only available information that compared all of the 15 Victorian NMUs.

3.17 These indicators were aligned with the performance areas to give an indicative, relative ranking of the NMUs. In cases where performance objectives did not have a quantitative indicator of performance, the NMUs were assessed against normative standards and the results were drawn from questionnaires and site visits. In addition to the publicly available data comparing performance between the NMUs, considerable data was collected from NMUs and information was provided that was used in assessing relative performance.

3.18 The purpose of the comparative analysis was to gain an understanding of the better performers against the performance objectives and to target those authorities in order to determine the drivers of better performance within particular areas.

3.19 **The key drivers affecting performance of the NMUs are considered to be providing customer satisfaction, contributory leadership, responsiveness to stakeholder requirements, commitment to innovation, awareness of risks and consultation.**

3.20 The impact each of the drivers has on performance, together with some examples of good practice to assist in the sharing of information, are outlined below.

Customer satisfaction

3.21 The most important driver for the NMUs is a focus on providing an effective and efficient service to achieve a high level of customer satisfaction.

3.22 This involves understanding customer needs and the service obligations that the NMU is required to meet. These service obligations should be clearly documented and accessible to customers. The responsiveness of the NMU in meeting those needs should be monitored and there should be strategies and actions to continually improve the quality of service provided to customers.

3.23 Customers expect NMUs to provide a range of services including water that is safe, clean, has a satisfactory taste, is reliable and with satisfactory pressure. They expect wastewater to be removed safely and reliably.

3.24 Overall, they expect value for money, bills that are clear and easy to read, convenience in bill payment and information on how to save on water costs. If they cannot afford to pay the bill by the due date they expect a helpful response and not to be disconnected. When they need to contact the NMU they expect helpful and courteous service with any issue resolved quickly and effectively.

3.25 Customers also expect to be consulted and informed on major issues that impact on services and costs.

3.26 All of the NMUs are endeavouring to provide good customer service. The better performing NMUs are generating customer satisfaction by identifying customer needs and clearly defining customer expectations within the plans and strategies of the corporate plan. They are assessing performance against challenging customer service targets. Some examples of practices implemented by NMUs that are aimed at enhancing customer satisfaction are shown below.

TABLE 3B
EXAMPLES OF PRACTICES DIRECTED AT ENHANCING CUSTOMER SATISFACTION

• **Coliban Water** gives a high priority to customer market research as input to its strategic planning. It conducts annual customer satisfaction surveys and carries out a 6 monthly survey of customers, who have contacted Coliban, to determine satisfaction with the service. Coliban conducts a series of focus groups comprising customers who are selected at random and paid $50 per attendance at the group. A total of 24 focus groups are held per year and are facilitated by the Customer Services Manager who is a trained facilitator. This comprehensive information on customer needs is a major input into the planning process and results in strategies and plans aligned to the needs of customers.
• **South Gippsland Water** obtains the benefit of external customer input to the strategic plan by inviting its Customer Advisory Committee to attend part of the annual strategic planning workshop.
• **Central Highlands Water** is prepared to commit financially to its obligations by having a customer charter with financial penalties on deviations set out in the charter. If the standards are not met, the NMU pays the customer the penalty without application by the customer. This results in a strong customer service culture throughout the organisation. The manager responsible for the area where the penalty was paid must appear before the Board to explain the reasons for the deviation and what is being done to prevent recurrence. In 1998-99 approximately $30 000 was paid to customers in penalties. This is a very tangible example of a customer-focused organisation, prepared to commit financially to customer service standards and drive corrective action if the required performance is not achieved.
• **Portland Coast Region Water** has an Enterprise Agreement for employees which specifies targets for customer service within the Agreement. This practice results in a clear understanding among employees of the obligations of the authority to customers and the rights of customers. It also encourages the development of a customer service culture throughout the organisation. A potential salary increase as reward for achieving customer service targets is a tangible incentive and reflects the high priority that the NMU gives to customer service.
• **Barwon Water** has developed a sophisticated system which provides the operator with one screen access to Geographical Information System data, customer data and billing data. This database provides the customer contact officer with all relevant information to answer queries. This enables the NMU to respond to customer queries in a timely manner and provides a one-stop-shop service, enhancing customer responsiveness and satisfaction.
• **South West Water** has a manual customer complaint system in which complaints are logged. A complaint form is forwarded to the appropriate operational area for action. If the operational area does not respond in a given time, there is follow-up. When the form is returned from the operational area to signify that the complaint has been actioned, the customer is contacted to determine whether they are satisfied with the outcome.

TABLE 3B
EXAMPLES OF PRACTICES DIRECTED AT ENHANCING CUSTOMER SATISFACTION - *continued*

- **North East Water** has responded to the needs of people living in older flats to remove the apparent inequity associated with one meter measuring the water consumption for the entire block of flats. With one meter the water consumption costs are spread across all flats and this means that those customers using little water are subsidising those customers using large quantities. North East has introduced a system to provide separate metering in existing flats. North East offers free meters, free plumbing advice and pay 50 per cent of the plumbing costs up to $100. This has been a popular system with body corporates and flat owners resulting in improved customer satisfaction.

Contributory leadership

3.27 While the audit did not examine the culture of the organisation or the style of leadership in detail, it was possible to gain an impression of the impact on effective performance resulting from the management practices and leadership styles.

3.28 The better performing NMUs had a participative style of leadership in which the vision for the organisation was articulated and shared. Staff were involved in the corporate planning process and were kept informed on all key issues. There was a clear understanding and appreciation of objectives, with open communication at all levels and a high level of mutual support and collaboration.

3.29 A desire to achieve optimum performance was evident among NMUs that exhibited a culture of innovation, responsiveness and productivity. Such NMUs empower and develop their people, communicate effectively with them and combine the needs of the organisation with the needs and desires of their people. They have made a shift from a control culture to a commitment culture.

3.30 An organisation that is continually attempting to improve performance is a learning organisation. Such an organisation is continually reviewing its standards of practices as well as constantly reviewing its performance to achieve best practice. It seeks to involve the whole organisation in its development and has processes in place to enable staff to actively contribute to its improvement.

TABLE 3C
EXAMPLES OF CONTRIBUTORY LEADERSHIP

• **Coliban Water** and **Gippsland Water** use a Business Excellence Framework for organisational self-assessment. The Framework was developed by the Australian Quality Council and involves the establishment of clear benchmarks against which the NMU can evaluate itself annually; detailed evaluation of progress against best practice management criteria; appointment of assessors from within the organisation; and identification of gaps in processes, procedures, practices and performance. The objectives are to promote personal and organisational learning through open evaluation of gaps between quality principles and what is actually happening. Rapid internalisation of knowledge across the organisation and staff involvement in the evaluation process to support commitment to business improvement are also key objectives. The Business Excellence Framework involves staff critically reviewing the performance of the organisation. It results in commitment throughout the organisation to continuous improvement.
• At **Western Water**, the Board is committed to improving performance with such commitment evident at Board level. A Board member is rostered to verbally report at the end of each Board meeting on performance at that meeting. The report can include any issue from quality of Board papers to whether the meeting was unbalanced in discussions. An external consultant is engaged once a year to review the performance of the Board and the Board Committees. This practice is setting an example for the whole organisation and is having a significant impact on the commitment to performance within the organisation.
• At **Grampians Water** it was apparent that the management team had an enthusiastic approach to delivering performance and was working closely together as a team. The team had a consultative approach to strategy development and was working to get an effective customer input into strategy development. The involvement of staff in decision-making, budget setting and risk assessment allows the organisation to use all its experience and expertise to gain excellent outcomes.

Responsiveness to stakeholder requirements

3.31 NMUs have a number of key stakeholders including the Government and the regulatory departments of government (DNRE, DHS, EPA and DTF), customers and employees.

3.32 In addition, there are numerous other stakeholders such as local governments, interest groups, business developers and other government departments such as Parks Victoria.

3.33 The NMUs generally have a strong stakeholder focus, with government requirements a prime consideration. These requirements include:

- meeting statutory, regulatory and customer service standards;
- ensuring there is adequate water supply with minimal restrictions;
- promoting efficient use of water and reuse;
- maintaining assets;
- paying a dividend;
- ensuring the NMU is viable by operating efficiently;
- optimising future capital expenditure;
- minimising financial and operational risks; and
- ensuring stakeholders views are considered and that there is adequate reporting of performance.

3.34 The Boards of NMUs are appointed by government and their tenure is dependent on how well they respond to the needs of government. The management of a NMU is appointed by the Board and the Board generally focuses on the needs of government when developing each CEO's performance plan and the overall corporate plan.

3.35 The EPA regulatory regime is an example of a clear government requirement. The EPA has strengthened its response to non-compliance in relation to treated wastewater and by-product discharges and sewer overflows. In particular, the public relations impacts of EPA actions encourages a positive attitude to environmental management. The tightening of the EPA regulatory regime is driving NMUs to improve their asset management and practices generally. Potential penalties have been significantly increased from a maximum of $20 000 to $240 000 for pollution events with penalties as high as $480 000 for aggravated pollution events.

TABLE 3D
EXAMPLES OF PRACTICES THAT
DEMONSTRATE RESPONSIVENESS TOWARDS MEETING STAKEHOLDER NEEDS

• **Coliban Water** commences its annual planning cycle in November by holding a 2-day workshop involving management and the Board. The workshop considers input from stakeholder research and is developed in accordance with the Corporate Planning Guidelines issued by DNRE. The data on stakeholder requirements includes customer survey and focus group results; information from meetings with EPA and DNRE as well as formal government policies as set out in the Memorandum of Understanding, government policy statements and discussion papers. The mission, vision, values and objectives are reviewed in detail at the workshop. The management team then develops a draft corporate plan, which is considered by the Board. Targets are set over a wide range of outputs and the organisation has a detailed monthly business report which is submitted to the Board indicating progress against the Corporate Plan with graphs showing actual performance against targets. This planning process has active Board participation with a strong emphasis on the needs of stakeholders. The Board actively monitors performance against all targets and seeks reasons for deviations. This results in strong stakeholder focus throughout the organisation.
• **Grampians Water** as with most other NMUs has been active in upgrading its system to meet government requirements of providing potable (i.e. safe to drink) water supply throughout its region. It has adopted an active customer consultation program in all 74 townships within their region. As a consequence of this consultation, some townships have elected not to have a treated water supply because of the cost involved. Following discussions with government it has been agreed to declare the reticulated water in these towns as non-potable and continue to use tank water for drinking. This example reflects that, while the NMU has been actively working to achieve government requirements, it has also considered the needs of customers.
• **Lower Murray Water** has developed close links with leaders in the local community including municipal councils and Members of Parliament to support economic development. It has developed a strong supportive culture using the theme "Growing our River Region". This partnering approach is resulting in improved performance in the provision of water and wastewater services to new developments.
• **East Gippsland Water** obtained a negotiated treated wastewater discharge agreement in relation to MacLeod Morass (marsh), taking into account competing requirements from stakeholders. The EPA, Parks Victoria, the local municipal council and the community had differing requirements. East Gippsland Water took the initiative to negotiate a compromise that resulted in an efficient outcome which satisfied all stakeholders. Given the number of stakeholders and the potential to have conflicting priorities, there is a need for NMUs to be able to manage competing stakeholder requirements.

Commitment to innovation

3.36 The NMUs as a group are under pressure to improve services to customers and meet increasing regulatory requirements. They can adopt a traditional approach or seek improved ways of achieving objectives, utilising new technology or innovative ideas from within and outside the NMU. A culture of seeking out better techniques, systems and technologies was found to be a significant driver of good performance.

3.37 Many innovative approaches were adopted to resolve issues that were unique to a particular NMU.

TABLE 3E
EXAMPLES OF COMMITMENT TO INNOVATION

• **Gippsland Water** and **South West Water** are facing some complex technical issues and have established special committees to address these issues. In the case of Gippsland Water the Board has appointed a Technical Review Committee, involving eminent specialists to advise on such issues. South West Water has an Alternative Technology and Research Committee, including Board members and management, which is seeking innovative solutions to technical problems e.g. sludge reuse. The establishment of these committees at the Board level has focused attention on options to solve complex technical problems. The high level of attention improves the likelihood of successful outcomes.
• A number of NMUs have innovative approaches to the development of effluent reuse schemes. **Grampians Water** and **Glenelg Water** have taken the initiative to develop reuse schemes to irrigate grapes for the wine industry. **Western Water** has entered into a 10 year contract with the private sector to take all treated effluent from the Melton Wastewater Treatment Plant for irrigation purposes. Actively seeking local industries that can reuse treated effluent, needs an innovative and often entrepreneurial approach.
• **South Gippsland Water** is driving effective use of technology by demonstrating a paperless approach to Board meetings. All Board members have been issued with laptop computers. Board papers are e-mailed to the Board. Board members take their laptop computer to Board meetings and all items for discussion are projected onto a screen. The Board decisions are typed and projected onto the screen and approved. Consequently, the minutes are virtually written at the meeting. Every 3 months the Board member is issued with a compact disk, which provides a record of all Board papers and minutes for the previous 3 months. This avoids the NMU and Board members keeping large volumes of paper. The Board is setting an example to the organisation in effectively using technology to improve the efficiency of Board processes.
• **Grampians Water** is piloting the use of "off peak" tariffs on public facilities such as ovals in Nhill as an attempt to reduce peaks on the distribution system. This involves installing 2 meters in parallel. While at this stage Grampians Water is relying on the honour system for customers to use the appropriate meter at the prescribed times, it would be relatively simple to install a changeover valve operating off a time switch. While "off peak" tariffs for electricity have been in place for many years, the application of this form of demand management is unique in the water industry. This demonstrates a very innovative approach to solving a local reticulation problem.
• **Westernport Water** undertakes an annual aerial survey of pipeline routes during the summer to find "green patches" indicating potential pipeline leakages. This demonstrates an innovative approach to locating faults in major pipelines.

Awareness of risks

3.38 Good performing NMUs had a disciplined approach to risk management. Risk management covers strategic, operational and financial risks. Risk management is designed to minimise the impact of detrimental events. The risk management framework is a key component of the corporate planning process. It involves an organisation-wide approach to identifying risks and to assessing the probability of occurrence and the consequences to the NMU.

3.39 Strategies and actions can then be put in place as part of the corporate planning process to reduce the probability of occurrence and/or the consequences.

3.40 The knowledge of risks, and having a framework for assessing actions that need to be taken (if any) to reduce the likelihood of an event occurring, enables the NMU to manage its risk. In particular, it enables the Board to systematically trade off the costs of an event occurring against the cost of reducing the risk. In this way good risk management is a primary driver for efficiency in a NMU.

3.41 Emergency management is a component of good risk management and involves the preparedness of the NMU to manage an emergency should a major event occur. This involves all staff being trained and practised in their role in an emergency.

TABLE 3F
EXAMPLES OF RISK AWARENESS

• **Western Water** has developed a risk framework for determining the priorities within its business planning process. Risks are categorised and are presented on a chart showing risks that are extreme, high, moderate, low and negligible. Corporate attention is directed to all the risks categorised as moderate and above. The audit committee of the Board oversees risk management and this reflects the high commitment given to risk management.
• **Goulburn Valley Water**, in partnership with its major food industry customers, has developed trade waste agreements that are focused on identifying current and future wastewater infrastructure capacity necessary to treat their respective waste loads. Salt was identified as a key issue for reuse of effluent and is a component of pricing in the agreement. This has had a positive impact on industry, with a customer altering its tomato peeling process from brine to steam-based.

Consultation

3.42 Consultation with customers and interest groups is a key requirement of the Government and should be a major input into NMU decision-making.

3.43 Generally, the NMUs have good practices in place to canvass community views on large projects and sewerage schemes for small towns. Such consultation tends to be focused and can often modify a project plan developed by a NMU.

3.44 Effective consultation requires a skilled facilitator and should extend to formal customer advisory committees and include customer input on such issues as pricing decisions, water restrictions, security of supply, water aesthetics, customer charter and formulation of strategy. Community input into such issues improves performance by creating a more effective, efficient and responsive organisation.

TABLE 3G
EXAMPLES OF EFFECTIVE CONSULTATION

• **Central Highlands Water**, together with government, adopted a successful process used on the Clunes Water Supply Scheme. A study of the scheme was undertaken within the authority and options were identified. The municipal council was briefed on the proposed scheme and the proposed consultation process, and meetings were arranged with the farmers who were most affected by the scheme if groundwater was the chosen option. An independent consultant was engaged to run the consultation process, and focus groups and one-on-one discussions throughout the community were organised. The consultant was supported by independent technical consultants who were engaged to provide technical advice to support discussions with the community. The NMU had open days, generally held at the local hall, to explain the project to the community. In the final phase, a polling consultant was engaged to poll opinions on the scheme. This was a comprehensive process that provided the community with independent knowledge of all options and sought the views of all members of the community.
• **North East Water** undertook an extensive consultation process in the Myrtleford area on the level of water treatment required to achieve health standards. The community is accustomed to water supply from mountain streams with minimal treatment and has indicated an intense dislike for chlorine disinfection. North East Water installed ozone and ultra violet disinfection in response to this strong customer preference. **Goulburn Valley Water** had a similar outcome following public consultation at Marysville, and is testing chlorine dioxide to determine customer reaction and the efficiency of disinfection throughout the reticulation system. These NMUs are taking a pro-active approach to delivering customer requirements through an effective consultation program. An often overlooked feature of water quality is taste and odour. NMUs tend to measure their performance by health standards, while customers may still regard the water as undrinkable.

• **Portland Coast Water** initiated a consultation study with the communities of Portland, Port Fairy and Heywood to:
  • determine the level of customer satisfaction with water quality in each of the 3 towns;
  • develop options for improvement to the existing water quality, based on the level of satisfaction; and
  • determine pathways for ongoing water quality improvements.
The study indicated a high level of satisfaction with the water quality improvements that were proposed by Portland Coast Water. Savings in the capital works plan of some $11 million also resulted from the consultation.

RESPONSE *provided by Chief Executive, Goulburn Valley Water*

The following are examples of drivers that have not been included in the Report:

- *An example of a significant customer satisfaction initiative that is being adopted by others in the industry is outlined below:*

  Goulburn Valley Water, in partnership with a small private company (Thinking Windows), pioneered the development of a water industry-specific water billing system known as "Aquarate".

  The major innovation of this system is that it links the service fee period with the meter reading period, calculated daily and billed to the customer in arrears. The system is stable, results in significant productivity and is very flexible in response to customers needs.

  Recent enhancements to the system include electronic billing and payment options for multi-property owners, and electronic processing of information statements for solicitors acting on behalf of our customers.

***RESPONSE** provided by Chief Executive, Goulburn Valley Water - continued*

- *An example of providing services that are commercially responsive to customers' needs is described below:*

  Goulburn Valley Water has implemented a state-of-the-art SCADA (Supervisory Control and Data Acquisition) system to manage operational water and sewerage facilities across the region. This system, supported by the development of a manned 24-hour customer service centre, provides enhanced levels of systems monitoring, surveillance and reliability to match the production cycle of our major food processing customers.

CONSTRAINTS

3.45 The performance constraints were assessed using a similar methodology to that adopted for the assessment of the performance drivers.

3.46 The NMUs were questioned about particular constraints they have to contend with in carrying out their business. Some constraints identified were common to all NMUs.

3.47 The poorer performing NMUs were identified using the performance data and normative standards and this information was correlated against particular identified conditions occurring in the NMUs. In this way it was possible to identify constraints that particularly applied to certain NMUs.

3.48 The constraints have been graded into 2 categories depending on the significance of the impact of that constraint on NMU performance. Constraints have been classified as:

- "primary constraints" which are those that have strongly affected performance; and
- "secondary constraints" that have had a negative but not significant influence.

Primary constraints

Economic

3.49 Under current government economic policy settings for NMUs, most NMUs are operating with less than 2 per cent return on total assets. This is lower than the rate of return accepted under the Office of the Regulator-General economic regime for other utilities such as gas and electricity. The levels of return are also significantly less than the returns generated by the Victorian metropolitan distribution and water retail authorities. A low rate of return implies that water is under-priced and the following consequences may result:

- Water usage may be higher than economically justified resulting in an earlier need for supply augmentation, depending on the elasticity of demand for water;
- With a freeze on prices, costs are increasing at a greater rate than revenue, particularly with increased capital and operating expenses to meet stricter water quality and environmental standards. This may reduce the incentive for NMUs to practise demand management as lower demand will reduce revenue and the operating surplus;
- The low price of reticulated water may reduce the economic viability of treated wastewater reuse; and
- The Government as the shareholder may be receiving an inadequate return on its equity.

3.50 Under current policy settings, the pricing of raw water for NMUs is higher than the pricing of raw water for irrigators. NMUs pay rural water authorities on the basis of a 4 per cent rate of return for raw water, whereas irrigators pay on the basis of a 0 per cent rate of return for raw water from the same source. This appears to be discriminatory pricing.

Regulatory regime

3.51 There is a level of confusion and lack of clarity in the regulatory regime under which the NMUs operate. Some of the problems are:

- Specific responsibilities of NMUs are not clearly established under current legislation, agreements or guidelines such as responsibilities for demand management and water conservation. This issue is recognised by DNRE and it is currently developing Water Service Agreements to rectify this deficiency;
- NMUs are currently regulated by 4 government bodies and there can be a lack of clarity in relation to responsibilities from the NMUs' perspective;
- Regulatory control of water conservation is unclear;
- Some confusion exists between the responsibility for health requirements of DHS and environment requirements of EPA for the reuse of wastewater and its by-products, in particular, biosolids. This can delay schemes and often defer them indefinitely; and
- Trade waste discharges to sewers such as industrial, commercial, medical, chemical, radioactive and biological wastes are not adequately managed and regulated. NMUs predominantly manage trade waste through individual agreements with businesses. Inconsistency exists between NMUs in relation to trade waste agreements. Instances were noted where agreements were not present for enterprises that potentially discharge hazardous waste. Potentially, NMUs could have their systems damaged and breach environment and health standards, and have little control over these outcomes. Also, the regulatory arrangements currently do not appropriately hold those discharging waste, responsible for damage caused to the sewer system and associated health and environmental impacts.

Uncertainty of NMU longevity

3.52 This constraint manifests itself as a concern in relation to amalgamation of NMUs. NMUs reported that there has been considerable conjecture over whether further amalgamations are proposed. There has also been a history of some NMUs actively lobbying to amalgamate with other NMUs.

3.53 As a result, some NMUs are reluctant to co-operate with each other and the potential for further efficiency gains is impeded (e.g. in purchasing practices and the introduction of new computer systems). There is little evidence of joint training nor the sharing of resources and research and development initiatives.

Water conservation regime

3.54 At present there are no regulatory requirements for water conservation by NMUs. The main driver for water conservation exists in NMUs where there is a scarcity of water supply and large capital investment is required to augment supply. Some NMUs are facing shortages in water supply with dam levels in July 2000 as low as 10 per cent and this heightens the need for active demand management. However, those NMUs that are not constrained have little financial incentive to allocate scarce resources to conservation. The result will be higher growth in water demand resulting in earlier augmentation costs in the longer-term.

Low level of competition

3.55 Competition has been proven to be a major driver of performance as recognised within the Council of Australian Government's accord on competition within utilities.

3.56 The water industry traditionally has been regarded as a natural monopoly. However, experience in the utility industries has shown that competition can be introduced to varying degrees and can be an effective driver of utility performance.

3.57 In Australia and overseas, there has been a trend to introduce greater competition into the water industry. Some of the techniques implemented include:

- *Comparative competition overseen by a regulator.* This involves establishing performance indicators among a group of water authorities with the presence of a regulator. The regulator develops, administers and publishes the performance indicators. Through the publishing of comparative information, pressure is applied to authorities to achieve optimal performance. Such a system is currently employed by the Office of the Regulator-General in relation to Victoria's metropolitan distribution and water retail authorities;
- *Competition for supply of inputs and management of operations of a water authority.* This form of competition is utilised to stimulate financial and operating efficiency and performance through driving down costs. Input cost competition can take many forms including outsourcing of functions, tendering for major supply contracts, using buying groups and utilising privately funded infrastructure. Examples in Victoria are the maintenance and operating contract at Coliban Water and the privately-funded infrastructure projects at Grampians Water, Coliban Water and Central Highlands Water; and
- *Competition enabling customers to have choice in their retailer.* This involves introducing an open access regime (as has been carried out within electricity and gas) to the pipes component and allowing competition in the supply of water and in retailing. This form and degree of competition is generally not considered to be appropriate for NMUs, given the absence of economies of scale and inability to construct competition for supply of wholesale water due to geographical and cost constraints.

3.58 The review found that the degree of competition currently applying to NMUs was of a relatively low level in relation to competition by comparison of performance indicators among NMUs and input cost competition in terms of resources utilised.

Secondary constraints

3.59 Secondary constraints are listed in the following table, which includes an explanation of each particular constraint.

TABLE 3H
LIST OF SECONDARY CONSTRAINTS

• **Availability of resources (staff, technical)**	In some rural areas it is difficult to recruit skilled staff and this has an impact on performance.
• **Availability of new technology**	NMUs are often too small to allocate significant resources into developing new technology. Joint funding of research and investigations in regard to the utilisation of new technology could overcome this constraint.
• **DNRE corporate planning process**	NMUs generally commence their annual planning cycle well before they obtain the annual DNRE Corporate Planning Guidelines. This creates difficulties in aligning plans to DNRE requirements.
• **Unclear accountabilities for raw water quality**	Raw water quality in the State river systems is impacted by many activities such as agriculture; mining and logging practices; commercial and industrial discharges; domestic and community waste management practices; and leisure and tourist activities. Various parties have responsibilities in relation to controlling potential impacts of raw water quality such as local governments through planning and development functions, the EPA through pollution control, and catchment management authorities through management of land and waterway environments. Rural water authorities are responsible for the provision of raw water to NMUs, although they are not specifically responsible for the quality of such water. The NMUs are responsible for the quality of water delivered at the tap and have virtually no control of the quality of raw water inputs. As such, NMUs generally have to take full responsibility for cleansing raw water of contaminants and pathogens resulting from upstream activities.

CONCLUSIONS

3.60 Performance comparisons between NMUs are difficult due to the difference in water collection and treatment requirements, geographical distribution and social demographics.

3.61 The industry is a monopoly water service provider and there are few demonstrated competitive drivers.

3.62 This audit has isolated key drivers of efficient and effective performance by NMUs. These drivers generally reflect attitudes adopted within NMUs and are, therefore, controllable by NMUs. The drivers include adopting a customer and stakeholder focus with a commitment to innovation and continuous improvement. Other drivers include a contributory leadership style, a commitment to risk management and consultation. Observation also suggests that the converse of these drivers inhibit the performance of NMUs.

3.63 Potential constraints that affect the performance of the NMUs were also evident. These constraints were generally external to the NMUs. As such, NMUs exercised little control over these constraints. The constraints included external economic determinations, fragmented regulatory control and a non-co-operative industry structure. The key issues are:

- The NMUs have a wide range of performance objectives and there are trade-offs, particularly between the commercial and the service and quality objectives. This can be a difficult task for NMUs and wide consultation of stakeholders is likely to provide a better and more optimal balance of priorities;
- A sense of uncertainty of NMU longevity, which manifests itself in a fear of amalgamation, is preventing co-operation between some NMUs. Where co-operation has been achieved between NMUs, financial savings, technical innovation and better system risk management have been achieved;
- Apart from water scarcity, there is little incentive for NMUs to practise water conservation. Revenue is tied to the amount of water sold and reduced usage will, at least in the short to medium-term, reduce the financial performance of the NMU;
- The responsibility for raw water quality is unclear between rural water authorities, catchment management authorities and NMUs;
- The lack of clear guidance on the rates of return on assets that should be earned by NMUs is sending incorrect price signals which can discourage efficient outcomes; and
- There is pricing discrimination in raw water in favour of irrigators over NMUs.

RECOMMENDATIONS

3.64 NMUs should continue to foster an internal structure and culture that encourages a customer and stakeholder focus within the organisation, and a commitment to innovation, continuous improvement, consultation and risk management. Performance can be further driven if the organisational culture includes a contributory leadership style of management that values staff involvement.

3.65 To obtain the appropriate economic and financial outcomes throughout the water industry, pricing should reflect costs. Transparent subsidies can then be applied to those towns and industries that the Government might want to support. DNRE, as the responsible authority, should develop consistent pricing guidelines across the water industry.

3.66 Consideration should be given to the introduction of water conservation requirements for NMUs, within an appropriate regulatory regime. With limitations on natural water resources and a profligate (unnecessary) use of water, considerable scope exists to encourage and require more active water conservation measures. This would result in a reduction in infrastructure requirements and reduced impact on the environment.

3.67 Consideration should be given by the Government to improving consistency and control of trade waste discharged to sewers and regulating liability for damage caused by those discharging waste.

3.68 The Government should improve the accountability, responsibility, regulation and governance of raw water quality with the objective of aligning responsibilities to those parties that influence or control activities impacting on raw water quality.

3.69 The NMUs and DNRE should foster further co-operation among NMUs where benefits can be derived. This co-operation can be enhanced by the Government promulgating its policy on industry structure to provide increased certainty for individual NMUs.

3.70 Within the scope of government policy, consideration should be given to encouraging greater competition within the industry to enhance performance. This could be by means of increasing competition by comparison and harnessing competitive forces when purchasing.

3.71 Recommendations surrounding further co-operation and enhanced competition are potentially in conflict. Both can contribute to improved performance. It is envisaged that an appropriate balance could be reached in relation to co-operation and competition with the objective of optimising performance.

Part 4

Framework of Good Practices

INTRODUCTION

4.1 The second objective of the performance audit was to develop a framework of good practices that could contribute to enhancing performance suitable for use by non-metropolitan urban water authorities (NMUs) and other public sector authorities.

4.2 The audit set out to develop a framework of good practices for use by NMUs in the provision of water and wastewater services, and associated obligations. It should be possible to use this framework, and the process for its development, as a guide for the development of similar frameworks for other public sector authorities by replacing the water and wastewater functional framework with the functional framework of other sectors.

4.3 As NMUs are government authorities, they have a range of obligations in addition to the normal commercial and regulatory obligations. These additional obligations were taken into account in developing the framework of good practices.

4.4 The method adopted to develop the framework of good practices was founded on the approach used to identify the drivers and constraints to performance as set out in Part 3 of this Report. The method included:

- development of a generic NMU map applicable to all of the NMUs, setting out the key functions necessary for the delivery of water and wastewater services and associated obligations;
- categorisation of these functions into key performance areas;
- establishment of performance objectives for each performance area;
- identification of performance and relative performance of NMUs, as applicable, against performance objectives;
- identification of good management practices utilised by, and contributing to, NMU good performance; and
- identification of good management practices that contributed to good performance from normative models.

4.5 The NMU functionality map, key performance areas and performance objectives were established in Part 3 of this Report. These form the foundation of the framework for good performance.

FRAMEWORK OVERVIEW

4.6 The framework developed for good management practices has the following elements:

- **Performance areas**. These are a categorisation of the key activities and obligations of a NMU requiring management. They have been developed by mapping the functions of a NMU to identify common activities and obligations required in the provision of water and wastewater services. The NMU functionality map is set out in Chart 3A;
- **Performance objectives**. These are the key target outcomes in each performance area for a NMU. These have been developed through consultation with the NMUs;

- **Good management practices**. These are the good practices that contribute to the achievement of the performance objectives. They have been identified from NMU good performance and normative good management practices; and
- **Key performance indicators**. These should be established as a means of determining the performance of a NMU against the performance objectives. The identification and development of key performance indicators was beyond the scope of this audit.

FRAMEWORK OF GOOD PRACTICES

4.7 A Framework of Good Practices for NMUs is set out on the following pages. The Framework specifies the performance areas, performance objectives and good management practices relevant to Victoria's NMUs.

4.8 All of the good practices described in the Framework of Good Practices may not be applicable to all of the NMUs. Applicability of practices vary and will be dependent on the individual NMU's regional circumstances, attitude and capacity to implement practices. However, in general, most of the practices would be widely applicable to the NMUs.

4.9 The page opposite provides an overview of the Framework of Good Practices in terms of performance areas and associated objectives, while the following pages outline the good management practices of the Framework together with relevant examples.

4.10 Each management practice included has been specifically selected due to its potential contribution to good performance. The rationale for the inclusion of each of the management practices is set out in *Appendix C: Management practices and their contribution to good performance.*

4.11 In undertaking the audit, many good practices and some exceptional practices were observed among the NMUs. In general, all NMUs were utilising some good practices.

4.12 A number of observed good practices have been included for each performance area as a guide for NMUs on practical methods to potentially achieve better performance. The names of the NMUs have been included to encourage the dissemination of knowledge across the water industry. These examples are not exclusive or comprehensive. Other NMUs may be undertaking the same, similar or better practices. NMUs may also have poor pratices in other areas. It is recognised that the relative size of NMUs in terms of available resources has been a factor restricting the adoption of certain practices by smaller NMUs.

4.13 The adoption of the Framework of Good Practices as outlined in this Report and the development of a set of performance measures for each objective would assist NMUs implement a performance improvement program and achieve applicable objectives.

4.14 It is recognised that not all objectives are amenable to a quantitative performance measure, but it would be appropriate to have protocols in place. For example, a risk management protocol may include that an annual risk review takes place and risks are assessed by the Board in setting corporate strategy and these are outlined in the corporate plan.

Framework of Good Practices
Performance Areas and Objectives for NMUs

Performance areas	*Performance objectives*
❶ ***Customer service***	• Understanding of customer service obligations and NMU rights • Customer access to information on their obligations and rights • Provision of services that comply with obligations and are commercially responsive to customer needs • Continuous improvement in delivery of customer services
❷ ***Water management***	• Deliver drinking water in accordance with government requirements for public health and safety • Meet standards for water aesthetics (taste, colour and odour) that have been developed in consultation with customers • Balance future supply and demand requirements for water and treated wastewater in an ecologically sustainable manner • Promote efficient use of water by customers • Minimise system water losses • Maintain system pressure to supply short-term demand
❸ ***Environmental management***	• Discharge to the environment or reuse wastewater and its by–products (biosolids, gas, odour and noise) in accordance with government requirements • Increase level of reuse • Minimise wastewater system overflows and their environmental impacts • Maintain environmental flows • Manage trade waste to protect NMU systems, the environment and the quality of treated wastewater for reuse
❹ ***Commercial practices***	• Maintain financial viability • Maintain service delivery assets to optimise their useful economic life • Implement pricing policies based on cost-reflective user-pays principles • Provide an appropriate return to shareholders • Optimise future capital projects in relation to supporting growth and meeting economic and environmental requirements • Access to required knowledge, expertise and skills
❺ ***Corporate governance***	• Board sets strategic direction, approves business plans and monitors performance • Board establishes policies in relation to all key facets of NMU operations • Board establishes systems of control to minimise the potential for waste, fraud and corruption • Stakeholder views considered in relation to major change and initiatives • Provide appropriate reports to stakeholders • Manage strategic and operational risks appropriately

1

Framework of Good Practices:

Performance objectives	*Good management practices – customer service*
Understanding of customer service obligations and NMU rights	• Clearly documented customer service policies • Customer charter that sets out the obligations of the NMU • Regular customer relations training for staff
Customer access to information on their obligations and rights	• Clearly documented customer service policies • Customer charter that sets out the obligations of the NMU • Self-imposed penalties for non-performance of key customer services
Provision of services that comply with obligations and are commercially responsive to customer needs	• Comprehensive customer services strategy • Annual customer satisfaction surveys • Wide range of bill payment options • Comprehensive customer contact system that provides a "one stop shop" for customer queries • After complaint, customer follow-up process to determine satisfaction with service • Appointment of customer services manager • An organisational culture that promotes customer service
Continuous improvement in delivery of customer services	• Annual employee surveys to determine any problems with attitude and culture • Focus group research to determine customer attitudes on key issues • Active customer advisory committee • An education program for customers

Customer Service

Customer service practice examples
• ***South Gippsland Water*** *has a self-imposed customer licence that is externally audited. While NMUs do not operate under a licence, this NMU has prepared a licence in a similar form to that which applies to metropolitan water authorities. This has heightened its customer focus and is preparing them for a possible future regulatory licence.*
• ***Barwon Water's*** *customer charter has a clear diagram which shows those parts of the pipework to the house that are the NMU's and customer's responsibilities. This assists customers with understanding their obligations and contributes to minimising conflicts as to responsibilities.*
• ***Central Highlands Water*** *has a marketing plan that specifically sets outs out plans and strategies for customer services and communication. Similarly,* ***Grampians Water*** *has separate customer services and communications strategies within its overall corporate strategic plan. The preparation of communications plans provides discipline in the dissemination of information, consultation and reporting, and allows performance to be monitored against the plan.* • ***Coliban Water*** *has a customer contact system in order to give the customer a "one stop shop" for billing, technical queries and complaints. This avoids the referral of customers around the organisation in having their complaints, queries and concerns addressed.* • ***Portland Coast Water*** *and* ***Lower Murray Water*** *have complaints systems which require follow-up with the customer to ensure they are satisfied. The practice of following-up all customer complaints provides NMUs with valuable information to improve performance and drives corrective actions designed to rectify customer complaints.*
• ***Lower Murray Water*** *and* ***South West Water*** *have contracted external parties to provide bill payment services. These provide customers with a wide range of payment options and increase customer convenience.*

Performance objectives	*Good management practices – water management*
Deliver drinking water in accordance with government requirements for public health and safety	• Water quality standards for health, taste, colour and odour • Clear, risk-based, strategic water development plan • "Catchment to tap" risk assessment • Program for continuous monitoring and independent testing of water quality • Effective asset protection plan • Incident management procedures and contingency plans, including simulation exercises
Meet standards for water aesthetics (taste, colour and odour) that have been developed in consultation with customers	• Water quality standards for taste, colour and odour
Balance future supply and demand requirements for water and treated wastewater in an ecologically sustainable manner	• Clear, risk-based strategic water development plan
Promote efficient use of water by customers	• An organisational culture that promotes water conservation and reuse • Strategy to conserve potable water for drinking by substituting raw water or treated effluent for non-potable uses • Education and incentive programs for customers to use "water saving devices" • Education and regular consultation with high demand customers • Smart metering
Minimise system water losses	• Water balancing analysis • Asset condition, risk and life cycle cost analysis and maintenance
Maintain system pressure to supply short-term demand	• Reticulation pressure management

Water Management

Water management practice examples
• ***East Gippsland Water*** *is using a Hazard Analysis and Critical Control Points (HACCP) approach to manage risks in meeting water quality standards and it has a dedicated officer to manage this process. The system contributes to delivery of high quality drinking water as it identifies and assists with managing all key risks to drinking water quality from catchment to tap.*
• ***North East Water*** *has implemented alternative water disinfection for communities that are concerned with chlorinating water. This resulted in North East Water charging and recovering $50 per household for increased implementation costs.* • ***Westernport Water*** *has developed "calibrated tongues" for their water treatment plant operators to manage the taste of water. The operators have been given a number of calibrated samples of water for taste. They then taste the treated water from the plant, give a subjective evaluation compared with the standard and alter the plant settings if required. The NMU is using a relatively new basic technique to help ensure the water is treated to customer requirements.*
• ***Westernport Water*** *has negotiated a shared strategy for use of water from South Gippsland Water to augment its water resources.* • ***Central Highlands Water*** *has negotiated with the local municipal council to have their water quality catchment management objectives included in the municipal strategic statement that developers need to meet in future developments.*
• ***Lower Murray Water*** *has implemented a demand management system whereby customer water restrictions apply when the forecast temperature is 39 degrees, or above. This is effective in making the community aware of wasting water and managing system pressure on very hot days.*
• ***Portland Coast Water*** *is currently implementing an asset management system linked to its geographic information system and mapping database. This enhances identification and monitoring of assets for leakage.* • ***Gippsland Water*** *and* ***North East Water*** *account for their water to identify water losses and key areas for attention.*
• ***Central Highlands Water*** *is using an automatic pressure monitoring system to maintain constant pressure throughout the reticulated network, controlling water losses and minimising cyclic pressures within the network pipes.*

3

Performance objectives	*Good management practices – environmental management*
Discharge to the environment or reuse wastewater and its by-products (biosolids, gas, odour and noise) in accordance with government requirements	• Clear environmental objectives • Clear, risk-based, strategic environmental development plan • Environmental effects risk assessment and management plan • Program for continuous monitoring and independent testing of environmental discharges to land, water and air (odour) • Asset condition, risk and life cycle analysis and maintenance
Increase level of reuse	• Technical and marketing strategies for reusing treated wastewater and by-products • Reuse standards • An organisational culture that promotes environmental reuse • Education campaign on the benefits/disadvantages of reuse
Minimise wastewater system overflows and their environmental impacts	• Clear, risk-based, strategic environmental development plan • Environmental risk assessment and management plan • Wastewater/effluent non-containment, and odour discharge monitoring and management • Asset condition, risk and life cycle analysis, and maintenance • Effective asset protection plan • Incident management procedures and contingency plans, including simulation exercises
Maintain environmental flows	• Environmental flows management and monitoring system
Manage trade waste to protect NMU systems, the environment and the quality of treated wastewater for reuse	• System to identify all potential sources of non-domestic discharge to sewer • Non-domestic discharge agreements • Program for continuous monitoring of non-domestic discharge quality • Industry education campaigns on the effects of non-domestic waste • Non-domestic discharge user-pays pricing

Environmental Management

Environmental management practice examples
• ***Grampians Water*** *has a documented strategic plan for managing future environmental requirements. This plan is taken into account in preparing the business plan and ensures that the NMU is addressing its environmental obligations.* • ***South Gippsland Water*** *has developed and implemented an Environmental Management System (EMS). The EMS is a structured system that enables identification of obligations through to development and implementation of processes to manage and monitor obligations and achievements.*
• ***Gippsland Water*** *has arrangements with 3 co-operative research centres for expert advice on water, wastewater and the environment. This provides access to emerging environmental knowledge.* • ***Glenelg Water*** *has developed a strategy for treated wastewater reuse on plantations and is actively investing in the expansion of plantations to increase reuse.* • ***Goulburn Valley Water*** *is using covered lagoon systems to recover methane and reuse for heat and electricity.*
• ***Western Water*** *has implemented an incident management system and has trained employees in its application.* • ***Coliban Water*** *is undertaking flow monitoring and condition assessment monitoring for their sewer networks to minimise potential for system failure and overflows.* • ***Barwon Water*** *has set up an incident management room with access to all key communications, computer systems and contingency plans to enhance responsiveness to events.* • ***East Gippsland Water*** *has a comprehensive system to manage sewer overflows that is implemented throughout the field workforce to minimise impact of such events.* • ***South West Water*** *has sewage overflow clean-up equipment at strategic locations throughout their region to enhance response times to events.*
• *No examples documented.*
• ***Goulburn Valley Water*** *has been renegotiating trade waste agreements that focus on identifying the current and future wastewater infrastructure capacity requirements of major food processing customers to treat their respective waste loads.The capital cost of providing the new infrastructure is apportioned on a "capacity share" basis and recovered over a 15 – 20 year period. Costs of providing the infrastructure are transparent to the customer, which encourages them to focus on cleaner production techniques and waste minimisation practices within their factories.*

4

Framework of Good Practices

Performance objectives	*Good management practices – commercial practices*
Maintain financial viability	• Annual strategic plans, corporate plan and budgets • Long-term financial projections • Financial modelling of the business • Well documented commercial processes • Sound asset valuations • Effective financial recording systems • Active debtor follow-up • Reliable purchasing and inventory system • Effective performance appraisal and employee development systems for all staff • Regular organisational performance review
Maintain service delivery assets to optimise their useful economic life	• Reliable asset management system • Clearly defined performance standards of service delivery assets • Remote monitoring systems for critical assets • Reliable maintenance and work management system
Implement pricing policies based on cost-reflective user-pays principles	• Evaluation of costs segmented by services • Cost-reflective user-pays pricing
Provide an appropriate return to shareholders	• Evaluation of costs segmented by services
Optimise future capital projects in relation to supporting growth and meeting economic and environmental requirements	• Capital works program including financial, economic and environmental evaluation of alternatives
Access to required knowledge, expertise and skills	• Effective performance appraisal and employee development systems • Use of external expertise, including outsourcing where appropriate • Meaningful succession planning • Active co-operation with other NMUs

Commercial Practices

Commercial practice examples
• ***North East Water*** *has a system of debt collection which has reduced 60 day+ debtors from over $1 million to $59 000. This involves the application of restrictions on water supply only after every attempt has been made to contact the customer and, if they cannot afford to pay, assisting through moving them to a payment system.*
• ***Barwon Water*** *has an integrated asset management system that is linked to the geographic information system, customer database and the billing system. This is a very sophisticated asset management system that assists in identifying and rectifying system faults.*
• ***All NMUs*** *have implemented user-pays pricing for water supply through the 2 part tariff regime comprising a service fee and a water usage charge. In addition, some NMUs have systems in place that enable them to estimate cross subsidies between water and wastewater, and cross subsidies between large and small towns. A knowledge of costs of service is vital for pricing and decision-making in relation to capital expenditure and operating costs associated with current and future service provisions.*
• *No examples were provided*
• ***South Gippsland Water*** *has a documented system of approval for capital projects which requires an economic and environmental assessment to be carried out and the project to be formally approved by the Board. This provides scrutiny before a commitment to construct.*
• ***North East Water*** *and* ***Gippsland Water*** *have developed systems to identify staff skills, skill gaps and succession planning needs, and to incorporate these into personnel and departmental plans. Through this system, the NMUs minimised issues due to lack of skills and staff turnover.* • ***Grampians Water*** *has been working with the Co-operative Research Centre for Water Quality to develop blue-green algae treatment.*

5

Framework of Good Practices

Performance objectives	*Good management practices – corporate governance*
Board sets strategic direction, approves business plans and monitors performance	• Disciplined corporate planning process • Broad, competent skills-based Board • Audit committee • Executive remuneration committee • Special purpose committees • Customer advisory committee • Clear definition of roles and responsibilities • Regular Board meetings • Regular review of Board performance
Board establishes policies in relation to all key facets of NMU operations	• Comprehensive policy and procedure manual
Board establishes systems of control to minimise the potential for waste, fraud and corruption	• Board charter for Board members, including ethical standards • Pecuniary interest statements for managers and Board members • Internal and external audit • Authority manual setting out financial and other delegations • Legislative compliance framework
Stakeholder views considered in relation to major change and initiatives	• Effective stakeholder consultation
Provide appropriate reports to stakeholders	• Annual report • Annual report summary • Annual environmental report • Progressive reporting
Manage strategic and operational risks appropriately	• Annual risk review • Detailed emergency plan • Quality occupational health and safety procedures • Risk management reporting regime

Corporate Governance

Corporate governance practice examples
• ***Barwon Water*** *has a Water Resource Development Strategy Committee. The purpose of this Board sub-committee is to manage future water resources development.* • ***Glenelg Region Water*** *has a Reuse Committee to develop a major reuse proposal.*
• ***South Gippsland Water*** *has all current policies on the internal computer system so that employees have access to up-to-date policies and this enhances consistent application of the policies.*
• ***Coliban Water*** *has a Director's Code of Practice which hangs in the boardroom. This is designed to frequently remind the Board of the ethical standards expected.* • ***A number of authorities*** *have "declaration of conflict of interest" as the first agenda item at Board meetings.* • ***Gippsland Water*** *has a Board Members' Handbook, which sets out the roles and expectations of Board members.* • ***Central Highlands Water*** *has a compliance process that sets out the NMU responsibilities under legislation and other ministerial instructions. This is a formal process that enables the NMU to comply with legislation, regulation and directions of government.*
• ***Grampians Water*** *has developed different procedures for consultation on water supply and wastewater schemes for townships. In each case, consultation involves public meetings and technical presentations, however, in the case of wastewater the local municipal council is involved in the process and commercial presentations are provided. In the case of water, a non-potable supply is retained as an option.*
• ***Some NMUs*** *prepare a summary report to customers, which is distributed with a water bill, while some NMUs prepare an environmental report.* • ***Glenelg Region Water*** *organises a meeting with the local media following each Board meeting to publicise areas of interest to customers.*
• ***Goulburn Valley Water****, with the financial support of the Commonwealth Government, developed an agreement for the management and control of treated wastewater supplied to third party users for irrigation of crops, pastures etc.*

Part 5

Appropriateness of reported performance indicators

REPORTED PERFORMANCE INDICATORS SUBJECTED TO AUDIT

5.1 The 15 Victorian non-metropolitan urban water authorities (NMUs) are required to provide a performance report as part of their annual report under a Ministerial Direction issued on 11 July 1995. The NMUs are required to report performance against defined performance indicators and the variance against target in percentage terms. Targets are set at the beginning of each period and submitted to the Department of Natural Resources and Environment for approval as part of the NMU business planning process.

5.2 *Appendix B: Reported performance indicators* sets out further information in relation to the reported performance indicators (RPIs), the formulae and relevant interpretive information.

Financial performance indicators

5.3 The financial reported performance indicators (RPIs) predominantly measure the efficiency of the financial performance of NMUs during the period. The financial indicators address the efficiency with which assets are employed, efficient use of equity funding, financial management through viability and ability to service debt, service pricing efficiency and operating cost efficiency.

CHART 5A
FINANCIAL PERFORMANCE INDICATORS

Long-term profitability	• Return on assets
Owner's investment	• Return on equity
Long-term financial viability	• Debt to equity ratio
Liquidity and debt servicing	• Interest coverage ratio
Movement in real service prices	• Index of average price change
Operating efficiency	• Operating costs per unit of throughput

Service delivery performance indicators

5.4 The service delivery RPIs are measures of the effectiveness of NMUs in providing water and wastewater services to customers, and meeting their environmental obligations. These measures target reliability of water and wastewater systems and quality of water and wastewater.

CHART 5B
SERVICE DELIVERY PERFORMANCE INDICATORS

Reliability of water supplies	• % of properties interrupted
	• Average time of interruption
Reliability of wastewater collection services	• Overflows per kilometre of mains
Bacteriological quality of potable water supplied	• % of samples within specified limit for E.coli and coliforms
Physico-chemical quality of water supplied	• % of samples within specified limit for turbidity, colour and pH
Quality of wastewater disposal	• % of samples within specified limits as per EPA licence

Environmental performance indicators

5.5 The environmental RPIs measure the effectiveness of NMUs in reusing the main by-products of wastewater treatment (effluent and sludge) and, in so doing, contribute to environmental protection.

CHART 5C
ENVIRONMENTAL PERFORMANCE INDICATORS

Waste management for wastewater	• % of effluent reused after treatment • % of sludge from treatment reused

STAKEHOLDER REQUIREMENTS

5.6 The third audit objective included a requirement to assess the appropriateness of the RPIs. Appropriateness has been considered against the requirements of NMU key stakeholders.

5.7 For the purposes of this Report, it has been assumed that key government departments represent the government response to interest groups. For example, the EPA represents the government response to key environmental interest groups.

5.8 The key stakeholders identified are:

- Department of Natural Resources and Environment (DNRE);
- Department of Human Services (DHS);
- Environment Protection Authority (EPA);
- Department of Treasury and Finance (DTF); and
- Non-Metropolitan Urban Water Authority Customers (Customers).

5.9 Government department stakeholder requirements were identified through interviews with representatives from each department, review of key elements of legislation (e.g. Water Act, Health Act) and reporting requirements (e.g. EPA licences, DNRE business reporting). For customers as stakeholders, requirements were identified through review of customer surveys and customer charters, discussion with NMUs and drawing on industry knowledge.

Department of Natural Resources and Environment

5.10 DNRE is interested in the overall performance of each NMU through approval and monitoring of NMU corporate plans. This includes operational, commercial and financial performance; customer satisfaction; price structures and levels; meeting legislative requirements; drinking water quality; environmental responsibility; business planning; and large project investment.

Department of Human Services

5.11 DHS is primarily interested in the health aspects of drinking water quality and fluoridation. This includes the safety of the water distributed, in particular, bacteriological quality and safety in relation to key pathogens such as cryptosporidium and giardia. DHS is also concerned with potential effects on drinking water supply of events such as cyanobacteria (blue-green algae) outbreaks, potential water contamination incidents and flouridation practices.

5.12 DHS has an interest in the health aspects in the reuse of effluent and biosolids, and the health impact from sewage overflows and sewage treatment plant failure. However, these aspects are generally administered by EPA.

Environment Protection Authority

5.13 EPA is interested in the environmental impact from the collection, treatment and discharge/reuse of wastewater. This includes the quality of discharge of effluent to the environment; sludge management; reuse of effluent and biosolids and greenhouse gases; the environmental impact of sewage spills; odour from the collection system and treatment facilities; and noise.

Department of Treasury and Finance

5.14 DTF is interested in financial performance in so far as it affects the potential dividend to government from the NMUs, and impacts debt levels and debt structures. Areas of interest for DTF are dividend, dividend policy, debt funding and the financing and procurement of large capital projects.

Customers

5.15 Customers are a key stakeholder and are interested in price, product quality, service and environmental issues. In particular, customers are concerned with water quality; taste; colour and odour; reliability of water supply and wastewater collection; response to queries; complaints and system faults; value for money; bill payment options; involvement and consultation; and sensitive credit collection practices.

REPORTED PERFORMANCE INDICATOR ALIGNMENT

5.16 The appropriateness of the 12 RPIs has been assessed by aligning these RPIs to the requirements of each stakeholder. This exercise has been conducted to determine the extent to which the current RPIs meet stakeholder requirements.

5.17 Table 5D shows the alignment of the RPIs for each stakeholder. There are no RPIs that measure the requirements of employees.

TABLE 5D
ALIGNMENT OF RPIs WITH STAKEHOLDER NEEDS

DRINKING WATER

Information sought	*Relevant current RPI*
Bacteriological quality of drinking water	***Bacteriological quality of potable water***
Drinking water quality (colour, pH, turbidity)	***Physico-chemical quality of water***
Drinking water quality (taste and odour)	Not covered
Incidents of pathogens (e.g. Cryptosporidium)	Not covered
Incidents of blue-green algae outbreaks	Not covered
Catchment risk surveys conducted	Not covered
Fluoridation levels	Not covered

ENVIRONMENT

Information sought	*Relevant current RPI*
Environmental management system implemented	Not covered
Trade waste customers under agreements	Not covered
Trade waste customer compliance	Not covered
Water conservation	Not covered
Environmental impact of incidents	Not covered
Quality of treated wastewater discharged	***Quality of wastewater disposal***
Sludge management plan implemented	Not covered
Reuse of treated wastewater and biosolids	***Waste management for wastewater***
Odour from wastewater plants	Not covered
Noise at major installations	Not covered
Sewage overflows (number)	***Reliability of wastewater collection services***
Sewage overflows (volume and duration)	Not covered
Greenhouse gas emissions	Not covered
Efficiency of energy usage	Not covered

FINANCIAL

Information sought	*Relevant current RPI*
Return on assets	***Long-term profitability***
Level of debt funding	***Long-term financial viability***
Investment return	***Owner's investment***
Ability to meet debt repayments	***Liquidity and debt servicing***
Cost efficiency	***Operating efficiency***
Capital investment	Not covered

SERVICE DELIVERY

Information sought	*Relevant current RPI*
Reliability of water supply	***Reliability of supply – urban supplies***
Customer service/satisfaction	Not covered
Changes in price levels	***Movement in real service prices***
Responsiveness to queries/requests	Not covered
Consultation	Not covered
Skilled and motivated staff	Not covered

TABLE 5D
ALIGNMENT OF RPIs WITH STAKEHOLDER NEEDS – *continued*

DRINKING WATER

DHS	*DNRE*	*EPA*	*DTF*	*Customer*	*RPI adequacy*
●	●			●	***Adequate***
	●			●	***Adequate***
	●			●	
●	●			●	
●	●			●	
●	●				
●	●			●	

ENVIRONMENT

DHS	*DNRE*	*EPA*	*DTF*	*Customer*	*RPI adequacy*
	●	●			
	●	●			
	●	●			
	●			●	
	●	●		●	
	●	●		●	***Adequate***
	●	●			
	●	●			***(a)***
	●	●		●	
	●	●			
	●	●		●	***Adequate***
	●	●		●	
	●	●		●	
	●	●		●	

FINANCIAL

DHS	*DNRE*	*EPA*	*DTF*	*Customer*	*RPI adequacy*
	●		●		***(b)***
	●		●		***Adequate***
	●		●		***Adequate***
	●		●		***Adequate***
	●				***(c)***
	●		●		

SERVICE DELIVERY

DHS	*DNRE*	*EPA*	*DTF*	*Customer*	*RPI adequacy*
	●			●	***Adequate***
	●			●	
	●			●	***(d)***
	●			●	
	●			●	
	●			●	

Note: Refer to following page for footnotes.

Footnotes to Table 5D.

(a) This RPI requires clearer definitions for effluent reuse that accounts for evaporation and infiltration. Currently this is not specified explicity and is open to differing interpretations.

(b) The valuation of assets has a significant impact on this indicator. This indicator is adequate if a consistent method of asset valuation is used over time and across NMUs.

(c) There are a number of different ways to measure cost efficiency. While this indicator is adequate, other types of indicators or sets of indicators may be more appropriate, such as efficiency measures per employee and per customer.

(d) This indicator is intended to show how prices alter over a period of time. However, it also takes into account changes in volumes of services used. In times of constant prices, the indicator can still change due to changes in the volumes of services purchased. This is borne out through changes in the indicator for most NMUs in a period of price freeze. Accordingly, this RPI is not appropriate for its intended purpose and needs to be redefined.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

5.18 In assessing the appropriateness of the set of 12 RPIs, it is evident that:

- The set of RPIs currently in use is not sufficiently comprehensive to meet the requirements of the key stakeholders. The key deficiencies are illustrated in Table 5D. Alignment of RPIs with stakeholder needs is inadequate;
- In relation to the individual indicators comprising the RPI set, all are appropriate in terms of the relevance of their respective formulae, except for the Movement in Real Service Prices Indicator; and
- Other RPIs would benefit from a tightening of component definitions. In particular, the indicators for Waste Management for Wastewater, and Long-Term Profitability.

Recommendations

5.19 DNRE should undertake a complete assessment of stakeholder RPI requirements and develop a more appropriate set of external RPIs to accurately reflect these requirements, while taking into account the needs of NMUs.

Part 6

Accuracy and completeness of reported performance indicators

6.1 The third objective of the audit included a requirement to provide assurance in relation to the accuracy and completeness of the performance indicators (RPIs) reported to the Parliament and the community.

OVERVIEW OF EXAMINATION

6.2 We have audited the reported performance indicators of the NMUs for the year ended 30 June 1999 to determine the accuracy and completeness of the reported performance indicator information.

6.3 A description of the RPIs subject to audit examination is detailed in *Appendix B: Reported performance indicators.*

6.4 The audit testing of RPI accuracy and completeness was undertaken on a sample basis. Our sample covered all RPIs. The sample was developed in accordance with Australian Auditing Standard: AUS 514 *Audit Sampling and Other Selective Testing Procedures,* and resulted in the inclusion of around 3 RPIs from each of the 15 NMUs. Each RPI was examined across a selection of 4 NMUs. The sample was chosen in order to reach a Statewide conclusion, rather than an assessment of individual NMU performance.

6.5 For the sample of RPIs selected, accuracy and completeness was examined by determining whether:

- formulae used by NMUs to calculate RPIs were in accordance with the DNRE prescribed formulae;
- definitions of the component inputs to the RPI formulae were applied correctly;
- RPI calculations were performed correctly;
- RPI calculated results were those reported in the performance reports within the NMU annual reports;
- data used in RPI calculations was complete; and
- NMUs had reported all required performance indicators.

RESULTS OF EXAMINATION

6.6 The results of audit testing were examined and conclusions drawn in relation to the accuracy and completeness of the NMU RPIs. Materiality was applied in assessing the results. For the purpose of this audit, judgements surrounding whether a finding was material have been based on Australian Auditing Standard AUS306 *Materiality*.

Accuracy

6.7 Our audit testing found RPIs that had been compiled accurately and others where reported results were inaccurate for a variety of reasons. The key results of the sample testing are summarised below by RPI according to the number of material inaccuracies found across the particular NMUs where the RPI was tested:

TABLE 6A
NUMBER OF MATERIAL INACCURACIES PER NMU TESTED

Performance indicator	*No. of NMUs where material inaccuracy detected*	*No. of NMUs where RPI tested for accuracy*
Financial performance -		
Long-term profitability	3	4
Owner's investment	3	4
Long-term financial viability	1	4
Liquidity and debt servicing	2	4
Movement in real service prices	-	*(a)* 1
Operating efficiency	1	*(a)* 3
Service delivery -		
Reliability of supplies: Urban supplies	1	*(a)* 3
Reliability of wastewater collection services	2	4
Bacteriological quality of potable water supplied	-	4
Physico-chemical quality of water supplied	-	4
Quality of wastewater disposal	1	4
Environmental performance -		
Waste management for wastewater	-	4
Total material discrepancies	**14**	**43**

(a) Due to insufficient data maintained, testing of the RPI in all of the 4 NMUs selected was not possible.

6.8 Overall, of the sample of RPIs examined, 33 per cent were materially inaccurate. Causes of inaccuracy ranged from shortcomings in the actual process of gathering, recording and reporting of information to misapplication of the DNRE RPI definitions. The results pertaining to each indicator examined are set out below.

Long-term profitability

6.9 Three of the *long-term profitability* indicators tested were materially inaccurate. All 3 material errors were the result of misinterpretation of the applicable DNRE definitions for this indicator. Two of the 3 material errors were due to the inclusion of "funds received for capital works from governments or other parties" in the numerator. The definition specifically excludes such capital contributions. The other material error was due to the inclusion of interest in the numerator, even though the definition specifically requires earnings before interest.

Owner's investment

6.10 Three of the *owner's investment* RPIs tested were found to be materially incorrect. All 3 material errors were due to NMUs incorrectly including "funds received for capital works from governments or other parties" in the numerator of this calculation. These errors were the result of misinterpretation of the DNRE RPI definition.

Long-term financial viability

6.11 The material error noted for this RPI was due to the exclusion of certain debts from the total debt figure used as the numerator in the calculations tested. This occurred due to misinterpretation of the DNRE definition.

Liquidity and debt servicing

6.12 Testing of this RPI found 2 materially inaccurate RPIs. The same principles of definitional misinterpretation as noted with the inclusion of capital contributions in both the *long-term profitability* and *owner's investment* RPIs also apply to the results of this indicator. The types of issues observed were the exclusion of specific interest costs from the definition of "gross interest expense" and the inclusion of such interest expenses within the numerator.

Movement in real service prices

6.13 No material inaccuracies were detected in the sample for this indicator. However, at 3 of the NMUs tested we were unable to conclude on the accuracy of this indicator as the authorities were unable to provide auditable data to support their RPI result.

Operating efficiency

6.14 One material inaccuracy was found for the operating efficiency RPI. The material error was the result of the inclusion of significant additional aggregate expenditure in the calculation of the RPI as the authority did not eliminate inter-entity transactions.

Reliability of supplies: Urban supplies

6.15 One material inaccuracy in the RPIs tested was noted. The reason for this error was the exclusion of unplanned interruptions. Both planned and unplanned interruptions are required to be included in the calculation under the applicable DNRE definition.

Reliability of wastewater collection services

6.16 Based on our sample testing, 2 of the RPIs examined had been calculated materially inaccurately. One of the material errors identified resulted from the use of an inappropriate method for determining pipe length. The other material error was the result of an incorrect interpretation of the DNRE definition of spills, whereby other types of service interruptions and private spills were incorrectly included.

Bacteriological quality of potable water supplied

6.17 All authorities sampled reported results that were materially accurate for this indicator. There were some minor discrepancies that arose from misinterpretation of the DNRE definition of the RPI as well as some manual keying of data discrepancies. However, none of these resulted in material errors in the RPIs.

Physico-chemical quality of water supplied

6.18 All RPIs tested were materially accurate. Some minor discrepancies were identified during the testing in relation to data keying errors, however, these did not significantly impact the results.

Quality of wastewater disposal

6.19 There was one materially inaccurate result from the sample selected for testing for this RPI. The material error identified was a result of the authority performing testing procedures that were not in accordance with their EPA licence agreements.

Waste management for wastewater

6.20 All of the RPIs tested were materially accurate for this indicator. Although the audit procedures identified some definitional interpretation discrepancies, these were not significant.

Completeness

6.21 Our audit testing revealed that the data used in the calculation of the RPIs examined was, in all but 2 isolated cases, complete. In addition, our examination of completeness of RPI reporting in the annual reports provided evidence that only isolated incidents of non–reporting of RPIs had occurred for the 1999 financial year.

CONCLUSIONS, OPINION AND RECOMMENDATIONS

6.22 As part of our procedures, we gained an understanding of the systems and procedures adopted by NMUs to comply with performance reporting requirements. Areas identified for improvement that would apply to all or most NMUs are set out below.

Conclusions

Ambiguous RPI definitions

6.23 Many of the errors in calculating the RPIs resulted from misunderstandings or differences in interpretation in relation to the application of the DNRE definitions of the RPI formulae and formulae components.

Low quality data gathering systems

6.24 The visits to all NMUs revealed that spreadsheets and simple databases were widely utilised to record the non-financial data incorporated into indicator calculation and reporting. This included recording of spills, customer interruptions and testing results. Financial data was commonly drawn directly from the financial accounting systems.

6.25 The integrity, robustness and control over the databases and spreadsheets were generally of a low standard. The quality of systems varied and reflected the internal skills available at each NMU. Significant effort was found to be replicated at each authority and better practices were not shared.

Inadequate procedures for collating data and preparing calculations

6.26 There was an absence of formal, systematic procedures for data collation and calculations associated with performance reporting among NMUs. It was common for RPIs to be prepared on an ad-hoc basis, outside existing periodic reporting procedures (monthly and annually). Data maintenance, including data entry, database management and source documentation were poorly monitored and controlled.

6.27 The results of audit testing demonstrated the prevalence of errors attributable to process failure. Far higher accuracy could be achieved by NMUs adopting more formalised, consistent and controlled procedures for gathering data and preparation of calculations and reporting.

Poor independent review controls

6.28 Independent reviews and approval procedures in the calculation and reporting of performance indicators at NMUs were found to be inadequate.

6.29 NMUs did not conduct appropriate reviews of the performance information reported. The extent to which easily detectable errors were encountered supported the existence of this control deficiency. No evidence was found of review and/or approval of RPIs from the sample tested.

Duplicated RPI calculations

6.30 The majority of authorities did not prepare RPIs as part of the usual financial statement completion process. This increases the likelihood of errors and also the degree of inconsistency between data reported in annual reports and that reported directly to DNRE.

6.31 A number of instances were detected where NMUs prepared performance information for submission to the DNRE and prepared the information again for inclusion in the annual report. Consequently, inconsistencies were encountered in the calculation of information and differences occurred in the information reported to the DNRE and in the annual reports. Moreover, delays in completing performance information in some cases affected the availability of consistent source data.

RPIs not subject to audit

6.32 While users of the NMU annual reports may be of the impression that the reported performance indicators are audited, the RPIs are not subject to external audit. The external audit is limited to the audit of the financial statements contained within the annual reports.

6.33 The errors detected by this audit indicate that, on a Statewide basis, the results reported to Parliament, Ministers and the community have significant deficiencies in relation to the accuracy of the information reported.

6.34 The absence of an audit process reduces the incentive for NMUs to improve systems, processes and controls relating to preparation of performance data. There is also inadequate independent feedback on NMUs' processes and systems of internal control with respect to reported performance indicators.

6.35 Inaccurately reported performance data has the potential to result in users of the information such as Parliament, the relevant Ministers and various government departments making incorrect decisions.

Opinion

6.36 The preparation and reporting of RPIs is the responsibility of NMUs in accordance with applicable Ministerial directions and instructions from DNRE. The audit was conducted of the RPIs, reported by NMUs, for the financial year ended 30 June 1999.

6.37 The audit gathered sufficient and appropriate audit evidence to form a sector-wide view as to the completeness and accuracy of the reported performance indicators in order to indicate the level of assurance that could be placed on the RPIs.

6.38 Based on the results of the audit procedures conducted for the year ended 30 June 1999, we have formed the view that on a Statewide basis the level of assurance that can be placed on:

- the completeness of the reported performance indicators is high; and
- the accuracy of the reported performance indicators is low.

Recommendations

6.39 DNRE should reduce the risk of misinterpretation of the reportable performance indicators by providing greater prescription in the way in which definitions are to be applied; improving definitions of data to be used in calculations; and providing worked examples.

6.40 A co-operative project should be undertaken by NMUs to develop a standard system for recording and reporting RPI information. This should specifically include systems for recording customer interruptions, spills, scheduling of samples and result recording. Alternatively, if a good system exists within a NMU, this should be made available to all NMUs.

6.41 NMUs should review and, where necessary, improve the adequacy of their procedures currently in place for gathering non-financial performance data, along with the completion of calculations and reporting of results. This should include, but not be limited to, a review of:

- management of source documentation and records;
- data accuracy and completeness (including data entry);
- timeliness of data entry/capture;
- procedures for indicator calculation;
- accountabilities;
- maintenance of calculation records (prior periods) to ensure consistency; and
- NMUs' periodic reporting to management, the Board and stakeholders.

6.42 NMUs should implement procedures for independent review and approval of reported performance indicators. Indicator calculations should be checked by personnel independent of those preparing calculations. All RPIs should be approved prior to incorporation in the annual report and adequate documentation should be maintained for indicator calculations.

6.43 NMUs should endeavour to integrate performance indicator preparation with existing financial statement completion processes. This would include reconciliation and approval of calculations and the generating of one set of reported performance indicators. Integration of reporting processes would better facilitate timely and accurate reporting of results.

6.44 The annual report should contain a statement explaining that the reported performance indicators have not been audited or the level to which they have been independently audited.

6.45 DNRE should introduce an audit regime to ensure that publicly reported performance indicators are calculated in accordance with the definitions and are accurate and complete. In terms of the external financial statement audit, recent amendments to the *Audit Act* 1994 provide me with the power to audit reported performance indicators in terms of whether they are relevant to any stated objectives of an authority, are appropriate for the assessment of actual performance and fairly represent actual performance. Consideration will be given to applying this power on an annual basis to the non-metropolitan urban water industry.

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Appendix A

Conduct of the audit

AUDIT OBJECTIVES

The objectives of the audit were to:

- identify the key drivers and constraints affecting performance in terms of efficiency and effectiveness;
- develop a framework of good practices suitable for use by non-metropolitan urban water authorities and other public sector bodies that could contribute to enhancing performance; and
- provide assurance as to the appropriateness, accuracy and completeness of performance information reported to the Parliament and the community.

SCOPE OF THE AUDIT

The performance audit covered all of the 15 Victorian non-metropolitan urban water authorities (NMUs), namely:

- Barwon Water;
- Central Highlands Water;
- Coliban Water;
- East Gippsland Water;
- Gippsland Water;
- Glenelg Water;
- Goulburn Valley Water;
- Grampians Water;
- Lower Murray Water;
- North East Region Water;
- Portland Coast Water;
- South Gippsland Water;
- South West Water;
- Western Water; and
- Westernport Water.

PERIOD COVERED BY AUDIT

The audit examined the reported performance indicators (RPIs) for the year ended 30 June 1999. Between June and August 2000 the audit also examined practices in place in a number of key performance areas.

PLANNING THE AUDIT

During the planning phase of the audit, technical advice was provided to the audit team by:

- Mr William Robertson, Senior Lecturer, Department of Civil and Environmental Engineering, the University of Melbourne; and
- Mr Graeme Jackson, Technical Consultant, Victorian Water Industry Association Inc.

As part of developing the audit brief, an advertisement was placed in the press in August 1999, which invited interested parties to submit information or comments in relation to this project.

In addition, discussions were held with a range of bodies including the:

- Department of Natural Resources and Environment;
- Victorian Water Industry Association Inc.; and
- Public Accounts and Estimates Committee.

Feedback from these sources was taken into account in framing the audit objectives, defining the audit scope and identifying issues to be pursued in the audit.

RESOURCING THE AUDIT

This audit was contracted-out under contestable arrangements. An Ernst & Young led consortium consisting of Ernst & Young, Culley Knipe & Associates, and Connell Wagner were contracted to perform the audit.

ASSISTANCE PROVIDED TO AUDIT STAFF

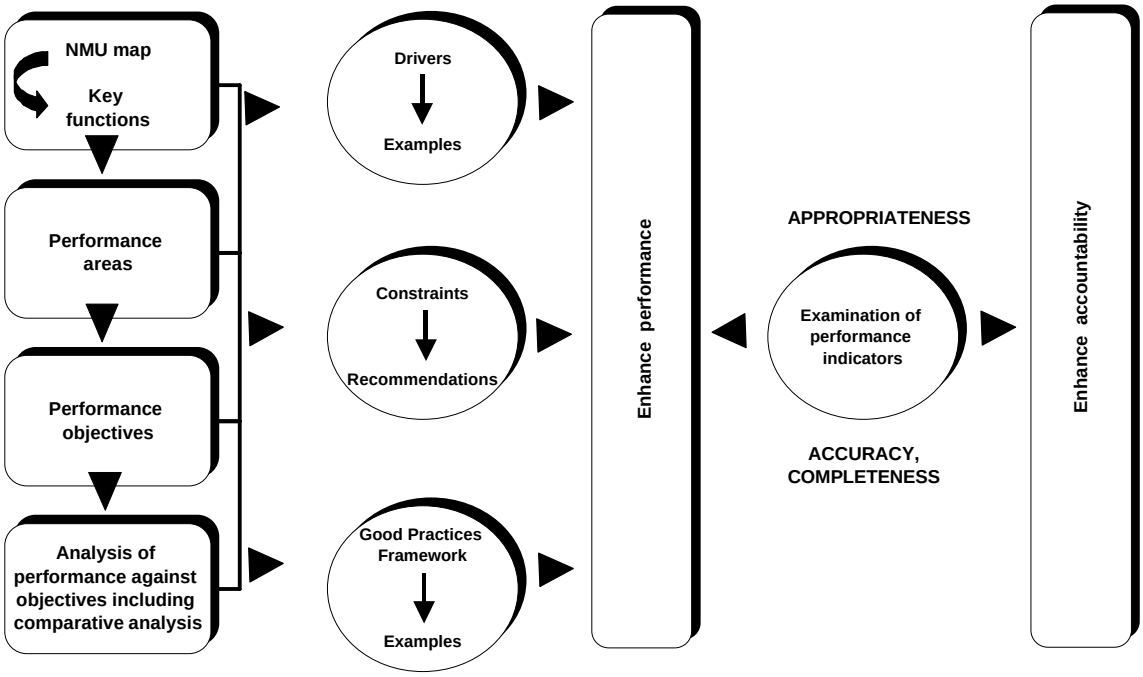
Significant support and assistance was provided to my officers and contractors by the management and staff of each of the Victorian non-metropolitan urban water authorities in the conduct of this audit.

CONDUCTING THE AUDIT

The audit has been performed in accordance with Australian Auditing Standards applicable to performance audits, and accordingly included such tests and other procedures as were considered necessary in the circumstances.

AUDIT APPROACH

The audit approach developed and deployed to conduct the performance audit is depicted below.



The approach adopted to determine the drivers and constraints to good performance was to first develop a NMU functionality map and, from this, determine key performance areas and associated performance objectives. Collectively, these are referred to as the generic NMU framework. This NMU framework was developed in consultation with the NMUs. The framework was the normative model against which drivers and constraints to performance were determined. Actual performance guidance was obtained by the review and ranking of reported performance indicators and Victorian Water Industry Association Inc. performance indicators.

The determination of good practices and the development of the Framework of Good Practices was based on the foundation of the generic NMU framework developed for driver and constraint assessment. This good practices assessment was aligned to achieve consistency in these audit components.

The approach adopted to determine the appropriateness of the RPIs was to determine the requirements of the key stakeholders and compare these with the RPIs for alignment, consistency and coverage. This approach was selected for its potential to identify key improvements.

In relation to determining on a Statewide basis the accuracy and completeness of the RPIs reported to Parliament and the community, the audit gathered direct evidence on a sample basis as to the accuracy and completeness of the indicators. The sample of indicators tested at each NMU and the conduct of associated audit procedures were designed to draw a conclusion across the entire NMU water sector, rather than at an individual authority level.

Appendix B

Reported performance indicators

Performance indicator reporting was introduced by the Victorian Government under the *Financial Management Act* 1994 for the non-metropolitan urban water authorities in 1995. The NMUs have been reporting against these indicators annually, commencing with the financial year ended 30 June 1996. The reported performance indicators, their formulae and a brief explanation of each is set out below.

FINANCIAL PERFORMANCE INDICATORS

Long-term profitability $\frac{\text{Earnings before interest and tax and after abnormals}}{\text{Average total assets}} \times 100\%$	This indicator demonstrates a NMU's ability to derive returns from its existing asset base, by measuring earnings before interest and tax (EBIT) as a proportion of average total assets. Revenue realised from contributed funds and contributed assets are excluded, as these do not reflect earnings attributable to effective and efficient use of existing assets. Interest is excluded as this reflects a funding decision rather than efficient use of assets.
Owner's investment $\frac{\text{Operating profit after tax}}{\text{Average total equity}} \times 100\%$	Return on equity indicates the return that the government is receiving on its investment in the NMU. This reflects returns in the form of movements in the value of the business rather than cash (dividend) returns.
Long-term financial viability $\frac{\text{Debt}}{\text{Total equity}} \times 100\%$	The ratio of debt to equity is an indicator of the extent to which the NMU's balance sheet is leveraged, or to which the NMU relies on external funding. This indicator is intended to signify the future viability of the NMU.
Liquidity and debt servicing $\frac{\text{Earnings before interest and tax and after abnormals}}{\text{Gross interest expense}} \times 100\%$	Debt cover illustrates the ability of a NMU to meet short-term debt repayment commitments (interest) and is an indicator of short-term viability.
Movement in real service prices $\frac{\text{Previous index X current year weighted average selling price X previous year CPI}}{\text{Previous year weighted average selling price X current year CPI}}$	This indicator is intended to reflect on an index basis, the real movement in prices charged by the NMU for services delivered to customers.
Operating efficiency **1. Water supply/wastewater collection** $\frac{\text{Operations, maintenance and administration expense}}{\text{ML transported or treated.}}$ This is provided for each of: • water supply bulk; • water supply reticulation; • water supply treatment; • sewerage reticulation; and • sewerage treatment where applicable.	Operating efficiency is reported for each of bulk water, reticulated water, treated water, wastewater reticulated and wastewater treated. The results reflect the operating efficiency of the NMU in each of the significant business activities. The indicator illustrates the cost (in dollars) of each litre of service delivered.

SERVICE DELIVERY PERFORMANCE INDICATORS

Reliability of supply - Urban supplies **1. Properties interrupted ratio** Number of properties that experienced a service interruption / Total properties receiving water x 100% **2. Interruption time (hours)** Average time taken in hours to restore an interrupted service	These indicators reflect the occurrence of customer interruption and timeliness of response to interruption and resolution.
Reliability of wastewater collection services (by town or sewerage system) Total number of confirmed sewage overflows / Kilometres of sewerage mains x 100%	This indicator reflects system adequacy in carrying effluent discharged by customers, as indicated by unplanned discharge to land.
Bacteriological quality of potable water supplied to customers (by town or supply zone) Number of samples having zero E.coli and zero coliforms / Total number of samples x 100%	A measure of the NMU's performance in supplying a potable supply of water to customers in accordance with the requirements of the Health (Quality of Drinking Water) Regulations. This indicator reflects the different water qualities that may be experienced by customers from each supply zone.
Physico-chemical quality of water supplied to customers for turbidity, colour and pH level (by town or supply zone) **1. Turbidity** Number of samples meeting guidelines for turbidity / Total number of samples tested X 100% **2. Colour** Number of samples meeting guidelines for colour / Total number of samples tested X 100% **3. pH level** Number of samples meeting guidelines for pH / Total number of samples tested X 100%	The indicators included as physico-chemical reflect the chemical and certain aesthetic characteristics of the water provided. This includes the acidity and colour of water, along with the presence of solids.
Quality of wastewater disposal (by treatment or disposal facility) **1. Aggregate annual performance of a treatment or disposal facility** Number of individual test results meeting EPA licence conditions / Total number of individual routine tests for the year X 100% **2. Short term/persistent compliance with EPA licence** Number of sets of test results meeting EPA licence conditions / Total number of sets of routine tests for the year X 100%	Management of effluent in an environmentally sound way is reflected in the results of this indicator. Results are based on the individual requirements of the Environment Protection Authority (EPA) licence, with respect to the characteristics of effluent discharged.

ENVIRONMENTAL PERFORMANCE INDICATOR

Waste management for wastewater **1. Wastewater effluent reused** Volume of effluent reused / Total volume of effluent produced	x 100%	Reflects the percentage reuse of sludge and effluent by NMUs.
2. Wastewater sludge reused/recycled Volume of sludge reused/recycled / Total volume of sludge produced	x 100%	

Appendix C

Management practices and their contribution to good performance

CUSTOMER SERVICE

Management practice	*Contribution to good performance*
Performance objective: Understanding of customer service obligations and NMU rights	
• Clearly documented customer service policies	• All staff understand their obligations to customers
• Customer charter that sets out the obligations of the NMU	• Customers understand their rights and can access required information
• Regular customer relations training for staff	• Provides staff with the techniques and skills to relate to customers
Performance objective: Customer access to information on their obligations and rights	
• Clearly documented customer service policies	• All staff understand their obligations to customers
• Customer charter that sets out the obligations of the NMU	• Customers understand their rights and can access required information
• Self-imposed penalties for non-performance of key customer services	• Provides customer recourse for non-performance of the authority
Performance objective: Provision of services that comply with obligations and are commercially responsive to customer needs	
• Comprehensive customer services strategy	• Outlines the direction for improvement in customer services
• Annual customer satisfaction surveys	• Provides feedback on performance to facilitate improvement
• Wide range of bill payment options	• Facilitates payment of accounts, reduces debtors and enhances customer convenience
• Comprehensive customer contact system that provides a "one stop shop" for customer queries	• Provides a comprehensive and streamlined service for customer queries by linking the billing, geographical information system, asset management system, and field work management systems
• After complaint, customer follow-up to determine satisfaction with service	• Provides valuable feedback from customers on the service provided
• Appointment of customer services manager	• Provides a focus in the organisation for customer services issues and performance
• An organisational culture that promotes customer service	• Staff are focused on improving customer service
Performance objective: Continuous improvement in delivery of customer services	
• Annual employee surveys to determine any problems with attitude and culture	• Assists in assessing staff attitudes to customers
• Focus group research to determine customer attitudes on key issues	• Defines areas of importance to customers on major strategic issues, such as water supply and wastewater schemes
• Active customer advisory committee	• Provides community input to decision-making on issues of concern to the community such as major projects, pricing, water restrictions, security of water supply and the customer charter
• An education program for customers	• Customers are provided with relevant information and understand the issues facing the authority

WATER MANAGEMENT

Management practice	*Contribution to good performance*
Performance objective: Deliver drinking water in accordance with government requirements for public health and safety	
• Water quality standards for health, taste, colour and odour	• Provides a clear understanding of water quality targets for planning and operation
• Clear, risk-based, strategic water development plan	• Provides guidance and clarity on NMU direction and resource allocation
• "Catchment to tap" risk assessment	• Identifies system risks and where resources should be allocated
• Program for continuous monitoring and independent testing of water quality	• Provides assurance that water quality is met and allows analysis for trends in water quality for pro-active action
• Effective asset protection plan	• Protects assets against vandalism/sabotage, plant failure and admission of toxicants into the system
• Incident management procedures and contingency plans including simulation exercises	• Maintains an active readiness for emergencies such as drought response, dam failure, high consequence reticulation failure and water treatment plant failure
Performance objective: Meet standards for water aesthetics (taste, colour and odour) that have been developed in consultation with customers	
• Water quality standards for taste, colour and odour	• Provides a clear understanding of water quality targets for planning and operation
Performance objective: Balance future supply and demand requirements for water and treated wastewater in an ecologically sustainable manner	
• Clear, risk-based, strategic water development plan	• Provides guidance and clarity on NMU direction and resource allocation
Performance objective: Promote efficient use of water by customers	
• An organisational culture that promotes water conservation and reuse	• Facilitates long-term water demand management and conservation
• Strategy to conserve potable water for drinking by substituting raw water or treated effluent for non-potable users	• Facilitates long-term water demand management and promotes efficient resource use
• Education and incentive programs for customers to use "water saving devices"	• Promotes water conservation
• Education and regular consultation with high water demand customers	• Facilitates long-term demand management and conservation
• Smart metering	• Encourages peak usage demand management
Performance objective: Minimise system water losses	
• Asset condition, risk and life cycle analysis and maintenance	• Minimises future maintenance costs and system failure
• Water balancing analysis	• Identifies and records losses in reticulation and water delivery systems with appropriate action plans
Performance objective: Maintain system pressure to supply short-term demand	
• Reticulation pressure management	• Minimises pressures throughout the system to reduce water losses • Maintains constant pressures throughout systems to reduce potential of pipe failure from cyclic stresses

ENVIRONMENTAL MANAGEMENT

Management practice	*Contribution to good performance*
Performance objective: Discharge to the environment or reuse of wastewater and its by-products (biosolids, gas, odour and noise) in accordance with government requirements	
• Clear environmental objectives	• Provides a clear understanding of environmental targets for planning and operation
• Clear, risk-based strategic environmental development plan	• Provides guidance and clarity on NMU direction and resource allocation
• Environmental effects risk assessment and management plan	• Identifies system risks and where resources should be allocated
• Program for continuous monitoring and independent testing of environmental discharges to land, water and air (odour)	• Provides assurance that environmental objectives and statutory obligations are met
• Asset condition, risk and life cycle analysis and maintenance	• Minimises future maintenance costs and system failure
Performance objective: Increase level of reuse	
• Technical and marketing strategies for reusing treated wastewater and by-products	• Improves efficiency of operation
• Reuse standards	• Facilitates the management of risks associated with reuse
• An organisational culture that promotes environmental reuse	• Facilitates long-term environmental management
• Education campaign on the benefits/disadvantages of reuse	• Allows for potential increase in reuse market
Performance objective: Minimise wastewater system overflows and their environmental impact	
• Clear, risk-based strategic environmental development plan	• Provides guidance and clarity on NMU direction and resource allocation
• Environmental effects risk assessment and management plan	• Identifies system risks and where resources should be allocated
• Asset condition, risk and life cycle analysis and maintenance	• Minimises future maintenance costs and system failure
• Wastewater/effluent non-containment, odour and discharge monitoring and management	• Minimises potential discharges to the environment
• Effective asset protection plan	• Protects assets against vandalism/sabotage, plant failure and admission of toxicants into the system
• Incident management procedures and contingency plans, including simulation exercises	• Maintains active readiness for emergencies such as treatment plant failure and sewerage overflows
Performance objective: Maintain environmental flows	
• Environmental flows management and monitoring system	• Maintains regulatory obligations for providing environmental flows
Performance objective: Manage trade waste to protect NMU systems, the environment and the quality of treated wastewater for reuse	
• System to identify all potential sources of non-domestic discharge to sewer	• Minimises risk of hazardous waste entering system
• Non-domestic discharge agreements	• Regulates non-domestic discharges to system
• Program for continuous monitoring of non–domestic discharge quality	• Shows compliance with the agreements
• Industry education campaigns on effects of non–domestic waste	• Creates awareness of impact of harmful waste in the sewerage system and the environment
• Non-domestic discharge user-pays pricing	• Provides pricing signals that reflect the potential impact and cost of the discharge on the wastewater system

COMMERCIAL PRACTICES

Management practice	*Contribution to good performance*
Performance objective: Maintain financial viability	
• Annual strategic plans, corporate plans and budgets	• Sets clear goals, directions and paths
• Long-term financial projections	• Enables financial performance to be predicted
• Well documented commercial processes	• Assists with training and audit processes
• Effective financial recording systems	• Monitors financial performance and facilitates management decisions
• Financial modelling of the business	• Provides forecasts of future financial scenarios
• Sound asset valuations	• Provides sound basis for performance measurement and setting prices
• Active debtor follow-up	• Minimises 60/90 day debtors and minimises working capital
• Reliable purchasing and inventory system	• Minimises stockholdings and assists in obtaining lowest prices through buying groups
• Effective performance appraisal and employee development systems	• Develops appropriate employee skills to meet the needs of the NMU
• Regular organisational performance review	• Identifies areas for improvement in performance through third party review
Performance objective: Maintain service delivery assets to optimise their useful economic life	
• Clearly defined performance standards of service delivery assets	• Enables performance to be monitored against standards
• Reliable asset management system	• Provides data for asset renewal and maintenance decisions
• Remote monitoring systems for critical assets	• Provides real-time information on critical assets
• Reliable maintenance and work management system	• Records materials, labour and plant to facilitate continuous improvement
Performance objective: Implement pricing policies based on cost-reflective user-pays principles	
• Evaluation of costs segmented by services	• Provides a knowledge of costs of each service for pricing and other decision-making
• Cost-reflective user-pays pricing	• Provides price signals that drive customer behaviour and resource allocation
Performance objective: Provide an appropriate return to shareholders	
• Evaluation of costs segmented by services	• Provides a knowledge of costs of each service for pricing and other decision-making
Performance objective: Optimise future capital projects in relation to supporting growth and meeting economic and environmental requirements	
• Capital works program including financial, economic and environmental evaluation of alternatives (including cost-benefit analyses)	• Rigorous evaluation of alternatives for each project on the capital works program
Performance objective: Access to required knowledge, expertise and skills	
• Active co-operation with other NMUs	• Enables benefits of economies of scale and ideas to be obtained
• Effective performance appraisal and employee development systems	• Develops appropriate employee skills to meet the needs of the NMU
• Meaningful succession planning	• Maintains continuous access to skills required
• Use of external expertise, including outsourcing	• Develops high quality and cost effective practices and solutions where adequate competence (in either skill or number) is not accessible within the NMU

CORPORATE GOVERNANCE

Management practice	*Contribution to good performance*
Performance objective: Board sets strategic direction, approves business plans and monitors performance	
• Broad, competent skills-based Board	• Provides skills in key areas of finance, water management, technical, environmental management, and customer service and consultation
• Audit committee	• Provides assurance of financial reporting and control
• Executive remuneration committee	• Provides integrity in setting executive remuneration
• Special purpose committees	• Provides input to the Board on specific issues. Such committees could include a risk management committee, technical advisory committee, capital works committee and/or project committees
• A customer advisory committee	• Board commitment to composition, structure and functions of the customer advisory committee
• Clear definition of roles and responsibilities	• Clear accountabilities are identified throughout the organisation
• Regular Board meetings	• Strategies and actions are in place to minimise risks
• Disciplined corporate planning process	• Outlines the future direction of the organisation
• Regular review of Board performance	• Facilitates progressive improvement in Board contribution to the performance of the NMU
Performance objective: Board establishes policies in relation to all key facets of NMU operations	
• Comprehensive policy and procedure manual	• Outlines for all employees, policies and procedures that must be followed
Performance objective: Board establishes systems of control to minimise the potential for waste, fraud and corruption	
• A Board charter for Board members, including ethical standards	• Clarifies the role and ethical standards required of Board members
• Pecuniary interest statements for managers and Board members	• Management and Board interests in businesses dealing with the authority are declared
• Internal and external audit	• Checks that policies and procedures are followed
• Authority manual setting out financial and other delegations	• Provides the limits of management approval and streamlines the management process
• Legislative compliance framework	• NMU compliance with statutory requirements
Performance objective: Stakeholder views considered in relation to major change and initiatives	
• Effective stakeholder consultation	• Improves NMU awareness and response to stakeholder needs
Performance objective: Provide appropriate reports to stakeholders	
• Annual report	• Provides reporting to stakeholders against the objectives and targets set out in the corporate plan
• Annual report summary	• Provides interested customers with information on the performance of the NMU and its future plans
• Annual environmental report	• Environmental performance of the NMU is reported to stakeholders
• Progressive reporting	• Enables stakeholder contribution on a timely basis
Performance objective: Manage strategic and operational risks appropriately	
• An annual risk review	• Monitors performance in accordance with the reporting cycle and establishes policy and strategic direction
• Detailed emergency plan	• NMU can respond to major emergencies
• Quality occupational health and safety procedures	• NMU is addressing occupational health and safety requirements
• Risk management reporting regime	• Enables timely action by management and Board

Appendix D

Government reviews in progress at 1 October 2000

ESSENTIAL SERVICES OMBUDSMAN

The Essential Services Ombudsman Bill currently before the Parliament requires all water authorities to belong to an external dispute resolution scheme approved by the Office of the Regulator-General. The aim is to provide an independent, fair and cost-effective mechanism to handle customer complaints and make rulings relating to compensation.

ESSENTIAL SERVICES COMMISSION PROPOSAL

The Department of Treasury and Finance has released a consultation paper on the proposed Essential Services Commission (ESC). The Government is proposing that the ESC would have responsibilities for economic regulation of the metropolitan, non-metropolitan and rural water and wastewater industry. Submissions closed at the end of September 2000.

NATIONAL COMPETITION REVIEW OF WATER LEGISLATION

In accordance with National Competition Policy, the Department of Natural Resources and Environment undertook a review of water legislation in relation to restrictions to competition. An Issues Paper was released on 1 June 2000 for public comment. Nineteen submissions were received. The submissions are currently undergoing assessment prior to the preparation of recommendations for government.

DRINKING WATER QUALITY REGULATORY FRAMEWORK PROPOSAL

The Departments of Human Services, and Natural Resources and Environment have released a consultation paper titled *A New Regulatory Framework for Drinking Water Quality in Victoria - Consultation Paper, August 2000*. The paper proposes that there be a comprehensive, Statewide regulatory framework for drinking water quality that provides clarity of roles and responsibilities (government, service provider, regulator and consumers) and greater confidence in the supply of good quality water. Submissions closed on 13 October 2000.

2001 PRICE REVIEW

The Department of Natural Resources and Environment has released a consultation paper titled *2001 Price Review of Water, Drainage and Sewerage Services in Victoria - Issues Paper, September 2000*. Public comment is sought on the price review process, and the development of a pricing framework and its key parameters such as capital and operational expenditures, asset values, depreciation and the rate of return. Submissions closed on 3 November 2000.

SUSTAINABLE WATER RESOURCES MANAGEMENT AND FARM DAMS

Victoria has a water resource regulatory regime that controls the extent of diversions from the State's waterways. However, one component of the water in a catchment is not subject to the regulatory regime. Farm dams that are not built on waterways are not subject to regulatory control. Concern has been expressed by existing users that the ever-increasing construction of these dams has the potential to affect downstream users and the environment in some catchments. The Department of Natural Resources and Environment released a Discussion Paper on 30 April 2000 concerning Sustainable Water Resources Management and Farm Dams. This Discussion Paper considers options for overcoming problems with the current approach to farm dams. Public submissions closed on 30 September 2000.

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