
6. ENVIRONMENTAL ISSUES

6.1 ENVIRONMENTAL MANAGEMENT INITIATIVES

6.1.1 Introduction

The unique environment of Cape Town is its greatest asset, both economically, and for prosperity and wellbeing of current and future generations. The effective management and enhancement of this unique environment is the responsibility of the City of Cape Town. The “Environment” in this context must be understood in a wide sense to include biophysical, social, economic and cultural heritage issues.

Management of the environment of the City of Cape Town (CCT) area is guided by emerging national as well as international law and legislation, together with the City’s own environmental policy principles and tools. The South African statutes which are relevant to environmental policy and management at the local government level are:

- The Constitution of South Africa, (Act No. 108 of 1996)
- Local Government: Municipal Systems Act, (Act No. 32 of 2000)
- National Environmental Management Act (NEMA), (Act 107 of 1998)
- Environmental Conservation Act, (Act No. 73 of 1989)
- Atmospheric Pollution Prevention Act, (Act No. 45 of 1965)
- Hazardous Substances Act, (Act No. 15 of 1973)
- National Water Act, (Act No. 36 of 1998)
- Biodiversity Act (Act No. 10 of 2004)

For further information on the abovementioned legislation refer to the document entitled “Environmental Legislation” [GOTO 6.1](#).

6.1.2 Environmental Policies

On the 31st October 2001 the City of Cape Town (CCT) officially adopted the Integrated Metropolitan Environmental Policy (IMEP) together with an implementation plan, called the Integrated Metropolitan Environmental Management Strategy (IMEMS) [GOTO 6.2 Web](#) or [GOTO 6.2](#). The development of IMEP followed an extensive and rigorous public process over a period of two years.

When adopting IMEP, the City committed itself to addressing priority environmental issues by developing and implementing detailed strategies, as well as implementing environmental management tools such as Environmental Impact Assessment (EIA) and State of Environment (SoE) reporting. IMEP

provides a vision for the environment of Cape Town in the year 2020, as well as policy principles which are intended to achieve the vision of a sustainable future.

The Year 2020 Vision for the Environment in the City of Cape Town includes the following:

- There will be a high expectation of the authorities in respect of environmental management, monitoring, auditing, as well as accountability. Environmental issues will be dealt with in a structured and efficient way, and impact studies will have ensured a better aesthetic and ecologically balanced City of Cape Town.
- There will be a positive relationship between local government and civil society, collective responsibility for the environment, and an ethic of partnership building.
- The City of Cape Town population will be environmentally educated, aware and conscious. Equitable environmental education will have ensured that people care for and respect their environment.
- The environmental quality will have improved in terms of air, water, land and sea.
- Environmental poverty will no longer exist and all communities will live in an environment that is not detrimental to their health or well being.
- Wastewater treatment facilities will be efficient and comply with legislative requirements.
- Water and energy resources and utilisation will be optimally and efficiently managed.

6.1.3 City of Cape Town: Environmental initiatives

The City of Cape Town has lead the way in environmental reporting, producing a comprehensive State of Environment (SoE) report each year since 1999 [GOTO 6.3 Web](#). The SoE report *aims to look at the relationships between various Economic, Biophysical and Social Indicators and provides detailed information on the current status of the environment, the pressures causing change and the emerging trends revealed by selected indicators*. This allows the City to assess management responses to changes in our environment and informs decision-makers, the public and other interested parties in an accessible way. Relevant sections of the SoE report for this WSDP include Inland Waters, Health, Infrastructure and Education.

State of River Reports

Since 2003, the City of Cape Town (in collaboration with DWAF, Western Cape Nature Conservation Board and University of Stellenbosch) has conducted several River Health Programme surveys of rivers in the greater Cape Town area. These surveys made use of biological monitoring techniques in order to determine the ecological health of rivers. The first survey addressed the health of the Diep, Hout Bay, Lourens and Palmiet River systems; the second focused on

the Berg River system and the third, for which field work is nearing completion, assessed river health in the remaining rivers in the City of Cape Town. Examples of these and other State of River reports and posters are available at Scientific Services or DWAF offices [GOTO 6.4 Web](#). The sites located within the City of Cape Town which were established during these surveys will be re-assessed annually.

Integrated Environmental Management (IEM)

The CCT subscribes to the philosophy of Integrated Environmental Management, meaning that the environment must be considered at all stages of service delivery, from planning to implementation, and monitoring. The City's IEM guidelines subscribe to the "cradle-to-grave" approach, requiring environmental input from conceptualisation to decommissioning for all its operations.

During 2004, the city trained and established a multidisciplinary Environmental Audit Team under the auspices of the Environmental Management Department, Development Directorate. Six-monthly internal audits have been scheduled for a selection of the city's facilities (Water Treatment Plants, Wastewater Treatment Works and Solid waste Disposal Sites). The audits are designed to compliment and support internal and external audits. They will flag in particular environmental issues of compliance or best practice relevance.

Environmental Impact Assessment regulations

The National Minister of Environmental Affairs & Tourism has identified various activities in terms of section 21 of the Environment Conservation Act (Act No. 73 of 1989) which may have a substantial detrimental effect on the environment and which therefore require prior written authorisation from the relevant authority. A Record of Decision authorising or refusing an application shall only be issued after consideration of reports concerning the impact of the proposed activity and of alternative proposed activities, as prescribed by the Environmental Impact Assessment ("EIA") Regulations, (Rf Gn No R1183 of 5 September 1997, as amended).

A number of City responsibilities for water services fall within the scope of the activities identified in the EIA regulations. They include:

- canals and channels, including structures causing disturbances to the flow of water in a river bed, and water transfer schemes between water catchments and impoundments
- dams, levees and weirs affecting the flow of a river
- reservoirs for public water supply
- schemes for the abstraction or utilisation of ground or surface water for bulk supply purposes
- sewerage treatment plants and associated infrastructure

In order to comply with the EIA regulations and ensure environmental impacts are kept to a minimum, the City has developed environmental assessment procedures for all the river maintenance / upgrading activities as well as bulk

wastewater activities. A checklist answer sheet and description form applicable to the capital works is completed to identify the category of the proposed works relative to the environmental requirements. Thereafter the necessary environmental procedures are followed, if necessary by appointing independent environmental consultants.

Environmental Management Programme for Civil Engineering Works

Environmental Management Programmes (EMPs) are a tool that facilitates appropriate environmental input during the construction phase of civil engineering projects, and thus form a crucial component of the IEM process and the ultimate attainment of sound environmental practice. Accordingly, the City has developed a state-of-the-art generic Environmental Management Programme, including Standard Environmental Specifications, Detailed Environmental Specifications and a range of supporting tools to facilitate the implementation of civil projects.

This EMP is included as an integral component of the Contract Documentation of all construction contracts, initiated by the City's line function that oversee construction activities, where there is a risk of environmental degradation or there is uncertainty regarding the environmentally sensitivity of the activity. Ultimately this approach will ensure the practical and effective implementation of environmental controls for these activities.

Integrated Metropolitan Environmental Policy (IMEP)

The sectoral strategy for water services based on the IMEP is given below:

A commitment to ensuring that the quality of coastal, marine and inland waters of the CCT is suitable for the maintenance of biodiversity, the protection of human health and a commitment to the principle that all CCT inhabitants have the right to clean, potable and adequate water sources. This commitment includes:

- Recognising that water is a scarce and valuable resource, which sustains communities, ecosystems and economic development.
- Recognising the importance of groundwater as a water resource.
- Management of water demand to ensure the long term sustainability and affordability of water resources and the environment.
- Ensuring water quality, at a minimum, meets national standards as established by the Department of Water Affairs and Forestry.
- The effective management of all wastewater systems.

6.2 WATER CONSERVATION AND QUALITY ISSUES

6.2.1 Quality of Raw Water Resources

The removal of tastes and odours from drinking water costs several million Rand per annum. Algal blooms are caused by inputs of nutrients into dams. This situation could escalate in the future if it is not addressed.

In order to at least stabilise and hopefully reduce the influx of nutrients and subsequent algal blooms, serious and urgent catchment management is required by the responsible authorities.

6.2.2 Potable Water

The quality of treated water is strictly monitored/controlled by the water treatment division and complies to SABS 241 and other guidelines. The Scientific Services Department conduct weekly visits to each WTP to test the water, inspect the process, retrieve various samples and analyse them. The results are then scrutinised, evaluated and compiled as a weekly report with comments. The WTP manager is given a copy of the results, one copy is sent to the Head of Bulk Water Operations and one is kept by Scientific Services. Composite sampling is carried out by the WTP on a weekly basis and these samples are also analysed by the Scientific Services Department and a monthly report is generated. *Odour and toxin producing Cyanobacteria (blue green algae) remain a threat to raw water supplies. Blooms are monitored according to World Health Organisation protocols and water treatment processes are accordingly adjusted.* Immediate response to operational problems and consumer complaints is affected by suitable experienced and qualified staff from Water Services. For details on raw water quality and treated water quality refer to table entitled "Water Treatment Data" [GOTO 6.5](#).

Weekly sampling is also undertaken jointly by the Health Department and Scientific Services. Samples are taken at various locations throughout the distribution network.

6.2.3 Implementation of Fluoridation Regulations

In terms of Regulations No. R823, dated 8 September 2001, promulgated under Health Act 63 of 1977, all water services providers are required to ensure a fluoride concentration of 0.7 mg/l in potable water for the purposes of reducing dental caries. Fluoridation is complex, expensive and a potentially hazardous undertaking and required the implementation of new infrastructure by September 2003 at an estimated cost of R11 mil, since the natural concentration of fluoride in CCT's water resources is insufficient. This issue has been put on hold. The running cost of fluoridation is estimated at R10mil per annum. Skilled operators required to manage the fluoride concentration are currently inadequate, and requires the training of additional staff. CCT have embarked on a public participation process. A report as tabled to the Trading Services Portfolio Committee gives more background [GOTO 6.6](#).

6.2.4 Treated sewage effluent released into Urban River Systems

Although it was previously an urgent requirement to adhere to the proposed 2010 standards, the implementation of these standards is currently being delayed by DWAF on the grounds that they are unaffordable. The City has been asked by DWAF to ensure that its WWTP comply with the 1984 Standards . However,

Each application for upgrading existing and building new WWTPs is being assessed on its merit and the reserve determination of the receiving water body.

Water Services will ensure that 90% of treated effluent is in compliance with current DWAF standards (1984 standards) by 2010.

Scientific Services generates quarterly and annual aggregate assessments of compliance for each individual treatment works and an overall summary for all facilities. Graphical representation of these statistics gives a visual “dashboard” of compliance for the key constituents stipulated in the permit is given in Table 6.1. For a comprehensive spreadsheet of results at each wastewater treatment plant for the year 2004/05 [GOTO 6.7](#).

Table 6.1
FINAL EFFLUENT QUALITY COMPLIANCE WITH STANDARD (%)

CAPACITY >15 MI/d	YEAR TO MAY 2005			
	Susp Solids	Chem Ox Demand	Ammonia	E.coli
Athlone	96	98	96	0
Bellville	86	82	66	2
Borcherds Quarry	98	96	77	74
Cape Flats	44	48	100	100
Macassar	96	94	85	75
Mitchells Plain	92	92	88	32
Potsdam ASP	92	90	94	2
Potsdam BIO	88	10	12	0
Zandvliet	98	98	98	96

MORE THAN 90% COMPLIANCE

75% - 90% COMPLIANCE

LESS THAN 75% COMPLIANCE

[GOTO fe compliance year to 2005.06.xls](#)

A network of monitoring stations on Cape Town’s rivers and wetlands is maintained with monthly chemical and bacteriological analyses being undertaken by Hydrobiology and Microbiology laboratories at Scientific Services. Sample locations are determined by the presence of potential sources of major pollution as well as various ecological criteria.

A team of trained biomonitoring practitioners from the City of Cape Town (Scientific Services), Department of Water Affairs and Forestry and CapeNature implement the River Health Programme (<http://www.csir.co.za/rhp/>) in the Western Cape. Under the umbrella of this nationally supported programme, the ecological health of the City’s rivers is assessed annually. The health of rivers downstream of final effluent discharges from Wastewater Treatment Works is “poor” to “bad”, and only pollution tolerant organisms are generally found at these locations. Discharges from wastewater treatment works unnaturally augment river flows (particularly during low flow summer months) and this degrades instream habitat quality. “State of Rivers” reports documenting the ecological

health of rivers in the greater Cape Town area were produced in 2003 and 2005. A similar report addressing the health of the Berg River was produced in 2004.

The suitability of the receiving environment for recreational use is influenced by the presence of pollutants from a variety of sources including treated sewage effluent. Several of Cape Town's Wastewater Treatment Works have reached or are approaching their design capacities due to burgeoning development which is placing increasing pressure on the service. Bacterial water quality has a direct effect on the potential risks posed to users of water bodies e.g. recreational vleis and coastal bathing areas. In addition, high nutrient concentrations can result in growth of aquatic plants and algae that rapidly reach nuisance proportions and thus affect aesthetic enjoyment of water bodies. Some algae belonging to the Cyanophyceae ("blue-green algae") can produce toxins which are harmful to humans.

River, wetland and coastal monitoring results are discussed with inter-disciplinary teams at quarterly Catchment Management Team meetings chaired by Catchment, Stormwater and River Management, (Roads and Stormwater Directorate).

During 2004, an Environmental Management System was established for the Potsdam Wastewater Treatment Works by the Environmental Planning Directorate. The development of an EMS for the Mitchells Plain Wastewater Treatment Works is planned for 2006.

6.2.5 Impact of Industrial Consumers and Potential Pollution Sources

Effluent from industrial consumers generally is discharged into the sewage system and treated at the wastewater treatment works and is therefore not considered as a pollution threat.

However, that which ends up in the stormwater system presents a real and serious threat. Containment of chemicals in storage and during transportation presents a definite risk to the stormwater system and hence the environment at large. The Water Pollution Control Inspectorate and Tradewaste Laboratory are equipped to monitor industrial effluents and provide assistance with containment during pollution incidents.

6.2.6 Removal of Alien Vegetation

The CCT has an ongoing programme for the removal of alien vegetation in the catchment areas of their dams. This programme will have the effect of increasing available run-off. The CCT also contributes towards the removal of alien vegetation in DWAF catchments through a catchment management charge.

The City's Integrated Aquatic Weed Control Programme aims to assist with management of alien aquatic weeds which occur in rivers, canals, wetlands, dams and treatment ponds. Depending on conditions prevailing in the target water body, mechanical, manual, chemical or biocontrol methods may be recommended.

The national departments of Agriculture and DWAF have established regional aquatic weed management groups (the City of Cape Town is represented on the Western Cape Regional Aquatic Weeds group) which advocate this approach.

Mechanical removal methods which are sometimes combined with litter or silt removal activities can be destructive to rivers or wetlands since habitats and sediments tend to be disturbed. Timing of such activities outside of bird and frog breeding seasons is important. Chemical control methods involve the use of herbicides which have been registered for use in water and which are intended for use on the target weed. Trained operators should be used and it is useful to provide information to the public or erect signage to help with alleviating potential concerns about spraying herbicides over aquatic ecosystems. Biocontrol agents are generally insects which are natural enemies of the alien plant species. Introduction of biocontrols onto host plants can result in moderate to complete control of the nuisance plant population. Biocontrol agents are available in South Africa for control of water hyacinth (*Eichhornia crassipes*), water lettuce (*Pistia stratiotes*), parrots feather (*Myriophyllum aquaticum*), South American water fern (*Azolla filliculoides*) and kariba weed (*Salvinia molesta*). An addendum to the Catchment, Stormwater and River Management's River Maintenance Guidelines entitled "Decision Support Guide for the Control of Aquatic Weeds" is available and additional advice regarding integrated aquatic weed control can be obtained from Scientific Services or Catchment, Stormwater and River Management.

6.2.7 Atlantis Aquifer

An Environmental Management System (EMS) has been completed for the Atlantis Aquifer System, and an environmental consultant audits the EMS on an annual basis. In addition an environmental officer for the area was appointed in July 1999, to safeguard the environment, water supply infrastructure and to educate the public. The Council for Scientific and Industrial Research (CSIR) assist in monitoring water quality and aquifer levels on a regular basis. In terms of the National Water Act (1998), aquifers are protected by law.

Silwerstroom Spring which arises on the edge of the Atlantis dunefield is an important component of the Atlantis Aquifer water supply scheme: good quality water from the spring is used to blend with aquifer water. Abstraction of water at the Silwerstroom weir results in drastic daily water level fluctuations which has had a negative impact on the ecological health of the system and may have contributed to the growth of filamentous algae in the pool upstream of the weir. This practice has however recently stopped due to clogging of pump equipment by algae. A consequence of this has been that the Silwerstroom Spring now overflows the weir and is permitted to flow down to the sea thus restoring some of the ecological functioning of the system.

The spring is also unique since it supports a population of the endemic fish species, *Galaxias zebratus* (Cape galaxias). This Gondwanaland relic's closest genetic family is located in South America! The Water Department and ecologists from Scientific Services and DWAF are seeking solutions which will alleviate algae growth, allow sustainable abstraction and leave sufficient flow for the system and the *Galaxias* population to remain healthy.

6.3 STORMWATER MANAGEMENT (INCORPORATING CATCHMENT & RIVER MANAGEMENT)

Catchment, stormwater and river management in Cape Town involves both the quantitative and qualitative management of urban runoff in a manner that ensures public health and safety as well as conservation and enhancement of both the built and natural environments. This approach was formalized in 2002 by adoption of a comprehensive five year strategy formulated to guide improvement and enhancement of the service [GOTO 6.8](#).

6.3.1 Service Overview

Cape Town's stormwater management system comprises an extensive network of underground pipes and surface features such as rivers, canals and ponds as follows:

- 1 200 km Rivers and streams (of which 300km are maintained annually)
- 5 500 km of Underground Pipes and Culverts
- 650 Detention and Retention Ponds
- 150 000 Gullies and Intakes
- A vast and presently indeterminate network of informal or private channels and ponds

The current *service delivery model* comprises centralised strategic planning, monitoring, information management and community outreach support services with *decentralised service provision*, upgrading and maintenance of stormwater infrastructure and river systems including *community/user interaction*.

During the 2003/2004 financial year R48,4M was allocated to stormwater capital projects. Approximately three quarters of this budget related to public housing projects. During the corresponding period, repair and maintenance expenditure totalled R49M for both in-house and contract works. Although funding for stormwater has increased since the previous financial year, it is still far less than generally-accepted norms based on replacement values for the infrastructure currently estimated as R5B. This under-investment will ultimately result in deterioration of assets and reduced levels of service delivery.

6.3.2 Strategic Planning and Management

The work of the service is structured around various strategic focus areas and support programmes identified in the five year strategy referred to above. Progress on each aspect of the strategy is itemized in the tabulation below.

Strategic Focus Area	Priority Programme	Performance Target	Actual Performance
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Holistic Planning and Management	Catchment, Stormwater and River Planning	Complete and adopt at least two plans per annum. Eleven plans required by July 2007	Two plans completed and approved to date.
		Complete master plans covering at least 1000 ha p.a/	59 659 ha completed to date
	Integrated Urban Water Management	Establish fully representative multi-disciplinary co-ordinating team by July 2003	Integrated urban water management matters dealt with on an ad-hoc basis
		Convene meetings of co-ordinating team at least twice annually	
System Development, Upgrading and Maintenance	Stormwater Management Planning and Design Guidelines for New Developments	Completion by December 2002	Complete July 2002.
	Risk Based Approach for Upgrading and Maintenance	Develop and implement system by July 2005	Maintenance management system currently under development.
	Infrastructure Management System	Develop and implement system by July 2007	Initial investigations commenced
	Environmentally Sensitive River Maintenance Guidelines	Guidelines completed by June 2002 Fully implemented at operational level during 2002/2003 financial year	Completed December 2002 Complete
Public Safety and Environmental Protection	Flood Disaster Mitigation	Prepare Stormwater component of Corporate Disaster Plan	No progress
	Water Pollution Abatement	Define and implement generic protocols for water pollution abatement by June 2003	No progress
Information Management	Information Systems	Complete network data capture by December 2004	On target. 85% of area captured
		Finalise monitoring information system by June 2005	Slow progress due to technical and software difficulties
Regulatory	Control of Development near Watercourses	Upgrade draft guidelines to policy by January 2003	Completed September 2003
	By-Laws	Promulgate by July 2003	Still underway. Adoption anticipated in December 2004.
	Tariff Funding options	Report to Council on findings and recommendations by January 2004	No progress
Relationship Management	Management Integration Mechanisms	Monitor and improve running of catchment management teams	Four teams established June 2003. Teams reviewed and reorganised
		Convene quarterly meetings	On target
	Customer Care	Undertake biennial customer satisfaction surveys	No progress
	Staff Development	Three seminars	Three seminars held
	General Education Initiatives	Programmes run at various locations	Programmes conducted at Water Week, Youth Environmental School, Zeekoevlei Environmental Education Centre and at the Two Oceans Aquarium
	Partnership Development	Formulate guidelines	Proposal for funding submitted. Approval provisionally granted.

6.3.3 Service Outcomes and Performance Evaluation

Performance in terms of the desired service outcomes is monitored and evaluated by means of various key performance indicators. These measure and track the extent and nature of flooding and key water quality determinants in both inland and coastal waters.

Additional details and other pertinent information are contained in the 2003/4 annual report for the service [GOTO 6.9](#).

6.3.4 Future Outlook

Flood risk reduction for vulnerable communities will remain a top priority over the next five years given the adverse socio-economic impacts of flooding. A formal flood risk reduction and mitigation program is under development to deal with these problems in a systematic way.

Although the City's recreational waters are generally considered safe for contact recreation, water quality in many of the major watercourses is of concern. This is primarily due to rapid urbanization and capacity constraints on both water services and waste management infrastructure and services. Closer co-operation at a strategic level between those responsible for all three sectors of the urban water cycle (water supply, wastewater, stormwater) in accordance with the principles of integrated urban water management (IUWM) is required to effect change in this regard.

6.4 RELATED ACTS

6.4.1 The occupational Health and Safety Act 85 of 1993

The Directorate Water Services has a Health and Safety Management system in place entitled the Safety, Health and Environment Policy and Procedure Manual ([GOTO 6.10](#)). Its final version was approved in 2005.

The aim of this document is to outline the procedures that are required to be developed and put into practice to fulfil the requirements of the Occupational Health and Safety Act No 85 of 1993 [GOTO 6.13](#) or [GOTO 6.13 Web](#). Its key policy is to create and maintain a safe and healthy work environment for all Water Services employees.

The NOSA Management System has been adopted as a framework for this policy on occupational safety, health and the environment. The OHSAS 18001:1996 system is operative in respect of the Bulk Water Department, but not yet so for the other Departments.

The City of Cape Town's Vision Statement as follows, refers to two key elements of this policy:

"Develop and maintain a *safe, healthy* and clean city".

The following principles as prescribed in Section 8 of the OH&S Act guides the Directorate's approach and the Employer, inter alia:

- Must identify health and safety hazards and take the necessary precautions to protect employees;
- Should provide whatever is needed by employees to comply with the OH&S Act;
- Should provide employee training and guidance to improve productivity, safety and health;
- Should continually educate employees, cultivating safe working habits and a positive attitude towards health and safety practices.

Responsibility for Health and Safety

The assignment of Responsibility for Health and Safety in the City has followed the procedure spelt out in the OH&S Act [GOTO 6.11](#) .

The City Manager as Employer as well as all Management levels downwards in the structure, down to Supervisory level (as Responsible Persons), have formally accepted responsibility for the health and safety of the employees. A Competent Person is functioning and has appointed Subordinate Competent Persons at each of the Directorate's facilities. The duties of Coordinator and Advisors are being discharged. There are also Health-and-Safety Representatives, Health-and-Safety Committee Members, First Aiders and Floor Marshalls at each of these sites. This operational structure functions to assist line management with proper execution of the duties involved in the Policy.

Environmental Management

The Bulk Water and Wastewater Departments have made good progress with the implementation of the ISO 14001 Environmental Management System. The Reticulation Department still has to implement it.

The Scientific Services Department is monitoring all operations by analysing samples from the various facilities regularly. Similar monitoring at strategic points for river-, lake-, vlei-, sea- and air samples is also undertaken.

The wastewater from critical industries is being monitored by the Industrial Effluent Section in the interest of the wastewater treatment plants and the environment in general.

The results of the relevant analyses are regularly made available to DWAF and the City's management for any corrective action.

The Scientific Services Department is also offering a service to the public for the disposal of hazardous and toxic substances.

6.4.2 National Water Act

The CCT has registered its bulk water use in terms of Section 4 (Use of Water) of the National Water Act (1998). [GOTO 6.12GOTO NWA.doc](#). The registration application includes the registration of bulk water supplied to consumers outside the CMA.

The CMA falls within the Berg River Water Management Area. Approximately half of the CCT's raw water supply requirements originate from water sources within an adjacent Water Management Area (i.e. the Breede River Water Management Area). The CCT is represented on both these Catchment Management Agencies which have been created in terms of the National Water Act.

6.4.3 Water Services Act

In terms of the Water Services Act, every Water Services Authority has to:

- promulgate Water Bylaws, which set out conditions for the provision of water services. CCT is in the process of complying with this requirement. Refer to Section 3.6
- draft a Water Demand Management Strategy and Policy. CCT complies with this requirement. Refer to Section 4.3.

