GENERAL NOTICE

NOTICE 1045 OF 2005

PREFACE TO THE PROPOSED

PRICING STRATEGY

FOR RAW WATER

The Pricing Strategy for raw water was first published in November 1999. Since then there has been a need to update the strategy to take into account:

- The introduction of the Waste Discharge Charge System.
- The treatment of commercial water projects financed by non-governmental funding.
- The alignment of the Water Pricing Strategy to the requirements of the Municipal Finance Management Act 56 of 2003.

The attached revised proposed Pricing Strategy is herewith gazetted for public comment in terms of Section 56(7) of the National Water Act 1998, which requires that before setting a Pricing Strategy for water use charges the Minister must-

a) publish a notice in the Gazette-
   i. setting out the proposed pricing strategy: and
   ii. inviting written comments to be submitted on the proposed strategy, specifying an address to which and a date before which the comments are to be submitted, which date may not be earlier than 90 days after publication of the notice.

In compliance with the above requirement, the public is invited to comment in written on the attached pricing strategy. Written comments must be forwarded to:

Department of Water Affairs and Forestry
Private Bag X313
Pretoria
0001
Attention: Ms Nisha Rooplall (Sedibeng 363)
e-mail: qae@dwaf.gov.za

As required by the National Water Act No. 36, 1998, a period of 90 days will be allowed for written comments.

The closing date for comments is 30 September 2005.

DEPARTMENT OF WATER AFFAIRS AND FORESTRY

NATIONAL WATER ACT (ACT No. 36 OF 1998)

ESTABLISHMENT OF A PRICING STRATEGY FOR WATER USE CHARGES IN TERMS OF SECTION 56(1) OF THE NATIONAL WATER ACT, 1998

I, Buyelwa Patience Sonjica, MP, Minister of Water Affairs and Forestry, with the concurrence of the Minister of Finance, hereby in terms of section 56(1) of the National Water Act (Act No. 36 of 1998), establish a pricing strategy for raw water use, as contained in the schedule hereto.

SCHEDULE

A PRICING STRATEGY FOR RAW WATER USE CHARGES

PREFACE

The National Water Act, 1998 (Act no. 36 of 1998), gives power to the Minister with the concurrency of the Ministry of Finance, from time to time by notice in the Gazette to establish a pricing strategy for charges for any water use within the framework of existing relevant government policy.

The previous pricing strategy was published in November 1999 and since its publication there have been various developments that necessitate this review which include:-

- The implementation of the Municipal Finance Management Act
- Further developments to the Departmental computer system for charge administration
- The incorporation of the Waste Discharge Charging System
- Requests from stakeholders for a review of the strategy
- Capital projects funded by private sector funding

The Pricing Strategy in addition to the above must also consider the development of Catchment Management Agencies which will have a significant bearing on the way water resources are managed and protected.

This document sets the strategy for implementing water management practices according to the user pays and polluter pays principles and is the result of a process of consultation as required by the Act. Interested parties contributed to the final form of this document through their comments, which were considered and, where acceptable, incorporated into the strategy.

The measures adopted I believe have resulted in a document that takes into consideration the diverse and sometimes competing interest of various sectors while at the same time promoting efficiency and redressing the imbalance in access to water as a result of past laws.

Buyelwa Patience Sonjica, MP
Minister of Water Affairs and Forestry

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ABBREVIATIONS

CMA	=	Catchment Management Agencies
CUC	=	Capital Unit Charge
DWAF	=	Department of Water Affairs and Forestry
IAP	=	Invasive Alien Plant
NWA	=	National Water Act, 1998 (Act 36 or 1998)
NWRS	=	National Water Resource Strategy
O&M	=	Operations and Maintenance
PPI	=	Producer Price Index
ROA	=	Return on Asset
RQO	=	Resource Quality Objective
SFRA	=	Stream Flow Reduction Activities
TCTA	=	Trans Caledon Tunnel Authority
WARMS	=	Water Use Authorisation & Registration Management System
WDCS	=	Waste Discharge Charge System
WMA	=	Water Management Area
WRC	=	Water Research Commission
WRM	=	Water Resource Management
WSDP	=	Water Services Development Plan
WUA	=	Water User Associations

1 INTRODUCTION

This document is the first revision and extension of the Pricing Strategy for raw water use charges which was published in the Government Gazette No. 1353 of 12 November 1999.

This strategy refers to pricing for the use of water from South Africa's water resources and not to the pricing of water services, which is dealt with separately under the Water Services Act, 1997. In other words, the approach deals with first tier water, i.e. the use of raw (untreated) water from the water resource. It does not deal directly with second and third tier water, i.e. water supplied in bulk (often by water boards) and distributed to households (usually via a water services authority), except for water supplied from government water schemes. The strategy deals with all first tier water as reflected in the use of ground and surface water resources and covers the setting of prices by DWAF as well as by water management institutions as defined in the NWA.

2 LEGAL MANDATE TO THE PRICING STRATEGY

In terms of Section 56 of the NWA, the Minister may, with the concurrence of the Ministry of Finance, from time to time by notice in the Government Gazette, establish a pricing strategy for charges for any water use within the framework of existing relevant government policy.

The Pricing Strategy contains the objectives, methodology and implementation strategy for setting water use charges for purposes of:-

- funding water resource management by DWAF and water management institutions, through water use charges, Section 56 (2) (a).
- funding water resource development and use of waterworks by DWAF and water management institutions, Section 56 (2) (b).
- achieving the equitable and efficient allocation of water, through a charge hereafter referred to as the "economic charge", Section 56 (2) (c).
- providing for a differential rate for waste discharges, hereafter referred to as the WDCS, Section 56 (5).

3 THE OBJECTIVES THAT SHAPE THE PRICING STRATEGY

The following objectives are of principal importance when formulating or amending the pricing strategy:

- Social equity

  The Pricing Strategy for water use charges coupled to the granting of financial assistance will contribute to social equity and redress of the imbalances of the past, both with respect to equitable access to water supply services and direct access to raw water.

- Ecological sustainability

  In terms of Chapter 3 of the NWA, the water needs for the effective functioning of aquatic ecosystems must be protected. The water required for the ecological reserve must be safeguarded and the cost of managing the Reserve must be paid for by all registered and billable users in terms of Section 56(2) (a) (iv) of the NWA. To promote the preservation of resource quality, the polluter pays principle for waste discharge will be adopted into this pricing strategy.

- Financial sustainability

  In order to ensure financial sustainability adequate revenue must be generated to fund the annual cost related to:
  - the management of the country's water resources.
  - the operations, maintenance and refurbishment of existing Government water schemes.
  - the development of augmentation schemes.

The financial framework makes accommodation for the financial autonomy of CMAs. As stated in the previous Pricing Strategy, the full financial cost of water resource management and supplying water should be recovered from water users, including the cost of capital. While is important to keep water prices as low as possible, DWAF has to ensure that water is priced at levels consistent with efficient and effective delivery of services. This approach may be phased in by taking account of constraints of various sectors to adapt quickly to price increases.

- Economic efficiency

In the context of water scarcity, ensuring an efficient allocation of scarce water resources requires that the price of water is set to reflect its scarcity value, to ensure firstly that water is conserved and secondly that some water used for low-value purposes is redirected to alternative high value purposes. This can be done administratively or by using market related mechanisms. It is also critical to ensure that the water resource management systems implemented are cost effective and do not become an unnecessary financial burden on the water users.

4 CLAIMS ON WATER NOT SUBJECT TO PRICING

- **Permissible water use as described under Schedule 1 of the NWA.** This represents, inter alia, reasonable use for domestic, small (non-commercial) gardening, stock watering and waste discharge purposes, where individuals have lawful access to any water resource or sewerage system. It also includes emergency use during fires.
- **Basic human needs.** This represents the first component of the Reserve as defined in Section 1 of the Act, and provides for the essential current and future (10 years horizon) needs of individuals served by water resources concerned and includes water for dinking, food preparation and personal hygiene defined as 25 litres per capita per day. The Schedule 1 use contains a basic human needs component for certain individuals who access the water resources directly.

- **Ecological sustainability.** This represents the second component of the Reserve and refers to water (quantity and quality) required to protect the aquatic ecosystems of the water resources and ensure their sustainability.
- **International obligations.** The water required to meet South Africa's commitments regarding international waters will receive priority and will not be allocated for pricing purposes, except where specific agreements have been reached concerning the supply of water to neighbouring countries.

The water that is available after the above claims have been met can be allocated and can include water imported from other water management areas by means of inter-basin transfer schemes. This water use will be classified as productive use of water and is subject to pricing in terms of this strategy.

5 DEFINITIONS OF WATER USE

Section 56 of the NWA instructs the Minister to establish a Pricing Strategy for charges for any water use described in Section 21:

(a) taking water from a water resource;
(b) storing water
(c) impeding or diverting the flow in a watercourse;
(d) engaging in stream flow reduction activity;
(e) engaging in controlled activity which has a detrimental impact on water resources;
(f) discharging waste or water containing waste into a water resource;
(g) disposing of waste in a manner which may detrimentally impact on a water resource;
(h) disposing of water which contains waste from any industrial or power generation process;
(i) altering the bed, banks, course or characteristics of a watercourse;
(j) removing, discharging or disposing of water found underground for continuation of an activity;
(k) using water for recreational purposes.

The above mentioned water uses can be broadly grouped under three categories in the NWA:

Abstraction related uses
- Section 21 (a), Section 21 (b) and Section 21 (d)

Waste discharge related uses
- Section 21 (e), Section 21 (f), Section 21 (g), Section 21 (h) and Section 21 (j)

Non-consumptive uses
- Section 21 (c), Section 21 (e), Section 21 (i), Section 21 (j) and Section 21 (k)

The pricing strategy prioritises uses of water stated above, and over time will charge for most defined water use after consultations with stakeholders. Strategies are already in place and under review for abstraction related uses. With the implementation of the waste discharge charge system, most of the above-mentioned consumptive use will be charged for. A strategy is also being developed for section 21 (k), recreational use and will form the subject of a separate publication.

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6 FUNDING OF WATER RESOURCE MANAGEMENT

Water Resource Management expenditure relates to those activities that are required to protect, use, conserve, manage and control the water resources and manage water quality located within Water Management Areas (WMA). These costs do not relate only to water subject to pricing, but to the management of all water within a water management area. These costs could include but are not limited to the following activities:-

- Planning and implementing catchment management strategies.
- Monitoring and assessing water resource availability and use.
- Water use allocations.
- Water quantity management, including flood and drought management, water distribution, control over abstraction, storage and stream flow reduction activities.
- Water resource protection, resource quality management and water pollution control.
- Water conservation and demand management.
- Institutional development and enabling the public to participate in water resources management decision making.

A more detailed description including a split between abstraction and waste discharge activities is provided later in this document.

Initially water resource management will continue to be the task of DWAF. However, the NWA clearly states that the intention is to create CMAs (the first of which has been established) to whom DWAF will delegate or assign significant water resource management functions (The activities of the CMAs will be funded from the water resource management charges). In WMAs where CMAs do not exist, DWAF will function as the CMAs until they are established. Regional offices will undertake WRM functions in WMAs where not all functions have been delegated to CMAs due to a lack of capacity. In WMAs where both DWAF and CMAs are performing WRM functions, income will be shared pro-rata to input cost and this split will be reflected in all sectoral charges.

6.1 Budgeting of activity costs

DWAF/CMAs will annually budget for the estimated costs of activities to be performed by them in each WMA. The WRM functions that may be relevant are shown in the schedule hereunder. The division of functions between abstraction and waste discharge related uses will be done in accordance with the schedule hereunder. The water resource management charge for abstraction related water uses will be based on the budget for abstraction activities and integrated functions. The cost of waste discharge activities and integrated functions will be used for setting the waste discharge component of the WRM charge.

The costs of certain functions may be entirely allocated to either abstraction or waste discharge related uses as indicated, while there are other functions that are inherently integrated in nature. The costs of integrated functions need to be allocated between abstraction and waste discharge related use in a transparent manner reflecting the management effort incurred in the WMA. Allocation of the costs of integrated functions between waste discharge and abstraction will therefore be according to the management effort (resources) being allocated to abstraction related uses versus management effort allocated to waste discharge related water uses within the WMA.

Water to be imported via an inter-basin transfer scheme will reduce the potential for generating funds in the donor WMA through water use charges and increase the potential in the receiver area. This loss in income in the donor WMA must be funded by water use charges raised in the receiver WMA. The receiver CMA must reimburse a fixed portion of the WRM budget of the donor CMA, based on the yield transferred calculated as a fraction of the total available yield at 98% assurance of supply, in accordance with the NWRS.

If the receiver WMA is still managed by DWAF and the donor WMA is taken over by a CMA, then DWAF needs to pay the CMA. If both the receiver and the donor WMA are still managed by DWAF, then DWAF will ring fence the transfer payment and spend this amount in the donor catchment.

Where the quality of streamflow from an upstream WMA to a downstream WMA imposes an additional water quality management cost on the downstream WMA, this additional cost needs to be funded by WRM charges on waste discharges in the upstream WMA. The upstream CMA must reimburse a fixed portion of the WRM budget of the downstream CMA (related to the additional water quality management cost), based on the discharge load in the upstream WMA as a ratio of the total discharge load in the downstream WMA.

6.2 Water resource management activities that could be taken into account for charge setting

No.	Function / Activities	Abstraction activities	Waste discharge activities
1	Catchment management strategy	• Resource studies, investigations and integrated strategy development	
		• Allocation plans	• Water quality management plan
2	Resource directed measures	• Reserve determination, Classification & Resource quality objectives.	
3	Water use authorisation	• Registration and verification of water use	
		• Abstraction & stream flow reduction activities licensing • Dam safety	• Waste discharge & marine outfall licensing
4	Control and enforcement of water use	• Abstraction & stream flow reduction activities control & monitoring	• Waste discharge and marine outfall control & compliance monitoring
5	Disaster management	• Flood & drought management • Dam safety control	• Pollution incident planning and response (management)
6	Water resources management programmes	• Integrated programmes	
		• Abstraction programmes [e.g. water conservation & demand management]	• Waste discharge programmes [e.g. cleaner technology, dense settlements, waste discharge strategies]
7	Institutional development	• Stakeholder participation, empowerment, institutional development & coordination of	

No.	Function / Activities	Abstraction activities	Waste discharge activities
		activities	
8	Water weed control	E.g. hyacinth	
9	Terrestrial Invasive Alien Plant (IAP)	Control of invasive alien plants with acknowledged negative impacts on water resources; e.g. riparian zones, mountain catchment areas, wetlands and in areas where there could be an impact on aquifers.	
10	Geohydrology and hydrology	• Monitoring groundwater yields & compiling of maps and yield information • Extending and maintaining the hydrological database	
11	Administration & Overheads	Admin & overheads for regional office or CMA	

6.3 Determination of sectoral water resource management (WRM) charges per WMA for abstraction related water uses

6.3.1 Water use sectors

The user sectors for which unit sectoral water resource management charges will be calculated are:

- Domestic/industrial (water services authorities, industrial, mining, energy)
- Agriculture (irrigation and intensive stock watering)
- Stream flow reduction (commercial forestry at this stage, other sectors may be added)

6.3.2 Assurance of water availability

Water for productive use is available or is abstracted at different assurances and this must be reflected in the price paid for water resource management services. Assurance of availability is taken into account by registering the estimated long term average annual volumetric use of the various users. This determination must take into account the historic availability of water through rainfall, run-off and storage characteristics in respect of individual water users and the imposition of water restrictions during droughts. The estimated long term average water use will be based on water allocations qualifying as existing lawful use.

6.3.3 Determination of annual sectoral use volumes per WMA for pricing purposes

The registered water use of the various sectors will reflect volumes as determined by using the following methodologies for the water uses as defined.

Section 21 (a) use Domestic/Industrial	- Water allocations as reflected on a lawful permit, general authorisation or licence and/or verified as existing lawful use, and amended for assurance of supply.
Irrigation	- The SAPWAT programme developed by the Water Research Commission or other methods as approved by the Department to determine average annual irrigated water use. Irrigation quotas, amended for assurance of supply, will be registered on waterworks owned by water management institutions.
Section 21 (b) use	- Where storage dams are built not for productive use, but only to enhance the real estate value of a property and the dam derives water from a watercourse having an assured low flow, or is fed by a stream controlled by DWAF or a water management institution, the initial filling, in the case of a new dam and the annual refilling, in the case of an existing dam, will determine the annual volume used consumptively. The registered volume subject to pricing will be based on the estimated net annual evaporation losses from the full supply surface area of the dam under average climatic and rainfall conditions. Section 21 (b) use will be classified as domestic/industrial and charged for under this sector
Section 21 (d) use SFRA (Forestry)	- Modified tables based on the WRC Report No TT 173/02 (April 2002): Estimation of streamflow reductions resulting from commercial afforestation in South Africa [MB Gush, DF Scott, GPW Jewitt, RE Schulze, TG Lumsden, LA Hallowes and AMM Gorgens] or other methods as approved by DWAF to determine average annual use.

The total volume of registered water use per WMA as captured by WARMS must be compared with the total allocable yield of resources within the WMA, in terms of the NWRS or the most recent determination. This volume must exclude the quantities set aside for the Reserve, international obligations and for existing transfer to other WMAs.

Where water in a WMA is fully utilised or over-allocated (registered use exceeds allocable water) the volume of registered sectoral water use will determine charges. In an under utilised WMA the volume of allocable water will determine charges. The estimated allocable sectoral use volumes will then be determined by applying the ratio of volumes registered by each sector to the allocable yield.

6.3.4 Cost Allocations to Sectors

Abstraction related water resource management activity costs must be allocated to sectors in proportion to volumetric mean annual sectoral use as registered, which reflects assurance of supply. Cost allocation will thus take assurance of supply into account, and differentiate between activities, as the cost of certain activities will only benefit some sectors and therefore will not be allocated to all user sectors. Cost allocations for abstraction related uses will be determined as follows:-

- **Domestic/Industrial** - This sector will attract all abstraction related activity costs pro rata to its share of total productive use in the water management area. The basic human needs requirement will be subsidised through the equitable share grants.
- **Agriculture** - This sector will attract all abstraction related activity costs pro rata to productive use.
- **Stream flow reduction activities** - Afforestation will attract all abstraction related activity costs, pro rata to productive use, except for dam safety control.

The activity input cost regarding an inter WMA transfer will be allocated only to those sectors that benefit directly through water allocations in the receiver WMA.

6.3.5 Geohydrology and Hydrology

The main charge under the above mentioned water resource management activity is for monitoring and is broken down into:-

- **Operational Purpose** - This type of monitoring is necessary for efficient water resources management and for water use billing.
- **National Network** - The national network is designed to effectively monitor the country's water resources. DWAF head office and regional office currently make the largest financial contribution towards identifying the need for new monitoring and continuation of monitoring at existing gauging points. Data and information gained at existing and new sites may be of direct benefit to a specific region or water management area. In these cases it is reasonable to charge a specific region or water scheme for this type of monitoring.
- **Compliance Monitoring** - Reserve determinations are being made and will be made in future. It is necessary to monitor the availability of the reserve on an ongoing basis. The existing network will be utilised for the purpose of reserve monitoring. Where this is not possible, and new monitoring points are needed, the beneficiary region or scheme will fund this function since it is part of effective water resources management.

It should be noted that the need for monitoring, as captured in the priority list for new gauging stations, stems from wide consultation which identified these requirements for purposes of planning, operation, resource quality management, surface and groundwater monitoring, flood and drought management. Charges for the above will only be applied to uses if the monitoring is specific to a particular water management area or a specific water scheme.

6.3.6 Water resource management charges

Unit sectoral water resource management charges for each water management area will be determined by dividing the total recoverable costs, per activity, by the registered or total

estimated allocable annual volume in an under utilised WMA for the sectors attracting the relevant activity cost. The resultant unit cost of activity will then be applied to each sector based on their relevant volumes, to arrive at a charge per activity. If an activity is not applicable for a specific sector, there will not be a charge for that sector and the cost of that activity must be divided by the volume of the remaining sector(s).

Unless other arrangements are approved by the DWAF/CMA the charges will result in a fixed payment which will be invoiced on a six monthly basis for the irrigation and stream flow reduction sectors and on a monthly basis for the other sectors. Maximum (capping) values could be determined on the basis of historical, socio-economic and other considerations. Reimbursement of inter WMA transfer payments will be done on a monthly basis in equal instalments.

It must be noted that if water use charges are too low they will lead to non-viable institutions, sub-optimal water resources services and overall deterioration of the water resources. There is therefore a need to adjust to higher real prices over time to accommodate the cost of effective and financially sustainable water management institutions.

6.4 Determination of sectoral water resource management (WRM) charges per WMA for waste discharge related water use

6.4.1 Water use sectors

The sectors for which waste discharge related water resource management charges will be calculated are similar to the sectors for the abstraction related charges, namely municipal (domestic), industrial, mining, energy and agriculture (excluding streamflow reduction activities). However, in calculating this charge, a distinction must be made between:

- Point source discharges directly to surface water resources
- Discharge to land based facilities (with potential non-point source impacts), such as irrigated effluent, tailings dams and evaporation ponds
- Point source discharges to the marine environment (marine outfalls)

6.4.2 Determination of annual waste loads per WMA for pricing purposes

Waste is defined in terms of Section 1 (1) (xxiii) of the NWA. The calculation of charges will be based on the registered discharge waste load of salinity and phosphorus, as representing the two most widespread water quality problems in South Africa, based on the following:

- Salt load will be estimated using electrical conductivity.
- Phosphorus (as the limiting nutrient for freshwater eutrophication) will be estimated using soluble phosphorus (phosphate).

The following methodology will be used to calculate waste loads for the following categories of waste discharge related water uses as defined:

Section 21 (f) use -Discharged salt and phosphorus waste loads calculated as the average discharge concentration times the discharge volume as

	reflected on a lawful permit or licence, general authorisation and/or verified as existing lawful use.
Marine outfall	- Disposed salt and phosphorus waste loads calculated as the average concentration times the volume of water as reflected on a lawful permit or licence and/or verified as existing lawful use.
<u>Section 21 (g) use</u>	- Disposed salt and phosphorus waste loads calculated as the average concentration times the volume of water as reflected on a lawful permit or licence and/or verified as existing lawful use.
<u>Section 21 (e) use</u> **Irrigated effluent [S37(1)a]**	- Irrigated salt and phosphorus loads calculated as the average concentration times the volume of irrigated water as reflected on a lawful permit or licence and/or verified as existing lawful use.

The point source salt and phosphorus waste loads in a WMA will be calculated from the registered discharge load in terms of Section 21(f). This will be distinguished from the total phosphorus waste load through marine outfalls [under S21(f)] and the total salt and phosphorus waste loads disposed to facilities [S21(g)] or land [S21(e)]

6.4.3 Cost allocations to sectors

The budgeted water resources management activity costs allocated to waste discharge related water use will be allocated to the water use categories according to the ratio of management effort applied in the WMA. Certain activities will only benefit or be related to specific water use categories and therefore will only be allocated to those categories. No differentiation will be made between sectors within a water use category. Cost allocations will be based on:-

- **Point source discharges** - Management effort for point dischargers, attracting all waste discharge related activity costs.
- **Marine outfalls** - Management effort for marine outfalls, attracting waste discharge activity costs except water resources monitoring, resource directed measures and water weed control.
- **Waste disposal to facilities / land** - Management effort for waste disposal to land, attracting all waste discharge related activity costs.
- **Irrigated effluent** - Management effort for irrigated effluent, attracting all waste discharge related activity costs.

The additional water quality management cost related to discharge load into a downstream WMA will be allocated to the waste discharge water use categories, except marine outfalls, based on the same management effort ratios.

6.4.4 Water resource management charges (Waste Discharge)

Waste discharge related water resource management charges for each water use category in each water management area will be determined by dividing the total cost allocated to each category by the total registered waste load of salt and/or phosphate for the water use category. The cost allocation to be recovered through charges on salinity and/or phosphorus loads will be based on the relative management effort associated with these two water quality problems within the WMA. In some WMA, this implies only salinity or

phosphorus discharge loads would be used to collect charges, while in other WMA the salinity and phosphorus loads would be weighted.

The charges will result in a fixed payment which will be invoiced on a monthly or six monthly basis, according to the abstraction related invoicing cycle.

6.4.5 Implementation of the charge

It is intended to implement the WRM charge on waste discharge in the 2007/08 financial year. This will require registration and validation of licensed, generally authorised and existing lawful waste discharge as soon as is reasonably feasible.

6.5 Other funding arrangements and limitations

6.5.1 SFRA (Forestry) Cap

WRM charges to the forestry sector are capped at R10 per hectare plus PPI rate (%) at June of each year with 2002-03 financial year as the base year.

6.5.2 Irrigation Cap

Water Resource Management charges to the irrigation sector are capped at 1.5 cent per m^3 plus PPI rate (%) at June of each year with 2006-07 as base year.

6.5.3 Phasing in of WRM charges

WRM charges for resource poor farmers and small forest growers will be phased in over five years through fiscal subsidy of amounts not recovered from the beneficiaries.

A differentiated subsidy policy will be applied to determine annual costs to be recovered from resource poor farmers and forest growers. A table providing details of the subsidy is provided in a later chapter of this document. The subsidy comes into effect on the date of registration of water use by individual resource poor farmer.

6.5.4 WRM functions undertaken by Water Boards, CMAs and WUAs on behalf of DWAF

In instances where Water Boards, CMAs, WUAs or local government perform water management functions on behalf of DWAF, an appropriate agency and compensation agreement will be drawn up between DWAF and the relevant Water Board, CMA, WUA or local government.

6.5.5 CMA as a DWAF agent for National Functions

A CMA may be contracted as a special project / programme (or even delegated) by DWAF to perform certain national functions, which DWAF would normally fund through parliamentary appropriation. A service or management fee will be payable by DWAF to the CMA as a condition of this contract or delegation. Functions that may be dealt with in this manner may include:

- National water resource monitoring (if this is not done by another institution)
- DWAF water resource management programmes or projects, where the CMA acts as an implementing agent on behalf of DWAF, possibly including compulsory licensing and classification.
- National developmental and/or empowerment programmes and projects where the CMA acts as an implementing agent for DWAF.

6.5.6 Other possible CMA sources of Income

In addition to water use charges and possible financial support from parliamentary appropriation, there are a range of other lawful income sources that the CMA may consider.

- Recreational concessions - Once the concession process for recreational water use has been established, the CMA may become responsible for implementing, administering or overseeing some of these concessions.
- Licence application fees - The CMA should receive a major portion of the license application fee as soon as it is, performing licensing functions, and ultimately should receive the entire fee once it is the responsible authority.
- Donor support and sponsorship - A CMA may fund its activities through any lawful source in addition to water user charges and parliamentary appropriations, which may include donor support or sponsorship. However, transparency must be maintained, as actual or perceived conflict of interest must be avoided. This should include constraints over the types of functions that may be supported, particularly from bodies with a vested interest in the WMA. All sponsorship and donor contributions in excess of R350 must get prior approval from the Minister of Water Affairs and Forestry.
- Contractual payments - The CMA may perform ancillary functions outside of its WMA, as well as non-water resource management activities that are related (incidental) to its functions or mandate, as long as this does not jeopardise its functions or detrimentally affect another water management institution.
- In-kind contributions - Although in-kind contributions are not explicitly income, they would reduce the expenditure and required income of the CMA. They are most relevant for institutional development and stakeholder participation related functions, but may include other bodies involved in monitoring and other water resource management activities coordinated by the CMA. All in kind contributions in excess of R350 must be reported to the Minister of Water Affairs and Forestry for prior approval.

6.5.7 Clearing of Invasive Alien Plants (IAP's)

The cost of control of certain IAP's may be charged to affected water users. In this regard the Regional Office or future CMA, in consultation with affected stakeholders, will recommend whether the control of IAPs in a particular catchment is necessary for water security and, from the range of options available, a cost effective action to increase long term water security and availability. Once agreement is reached on the method of controlling IAPs, and before going ahead with clearing, the cost of control must be communicated to all affected stakeholder organisations. These costs may be supported by subsidy where available and appropriate.

The agreed upon cost of control will then be allocated to all water user sectors in proportion to their registered abstraction related water use.

In the event of consensus not been reached amongst water user sectors, Regional Offices or CMAs will go ahead with clearing in co-operation with those sectors who have agreed to participate in the clearing process. The resultant additional water after taking the ecological reserve and reducing over allocation into account may be allocated to sectors that financially participated in the clearing project.

7 FUNDING OF WATER RESOURCE DEVELOPMENT AND USE OF WATERWORKS

Water resource development and use of waterworks refer to the planning, design, development, operation, maintenance, refurbishment and betterment (improvement) of Government water schemes and schemes to be funded by water management institutions like the TCTA and WUAs. If water use charges are too low, they will lead to underinvestment, over-consumption and unwarranted fiscal subsidies. There is therefore a need to adjust to higher real prices over time to accommodate the cost of investing in supply capacity to meet rising demand and to refurbish existing infrastructure.

7.1 Government Waterworks

In terms of section 56 (2)(b) of the National Water Act, 1998, water resource development costs could include the related costs of investigation, planning design and construction of water schemes, **which constitute the capital cost of projects.** This revised pricing strategy utilises the **depreciation, return on assets (ROA), betterments, refurbishment and off-budget funding** approach for setting charges to recover capital cost in respect of schemes owned by Government. In recent times, given the budgetary constraints from National Treasury on large-scale water resource infrastructure development, the mechanism of off-budget funding of commercially viable new water infrastructure by Funding and Implementing agents such as TCTA, has become accepted practice. The funding of these infrastructure developments requires loans, which naturally have certain repayment periods associated with them during which bulk water users must pay charges as per contractual agreement. State funding will in future be confined mostly to social, water resource development or betterment projects which conform to the purpose set out in section 2 of the NWA, 1998 and where the demand is not driven by specific commercial water users or sectors. Capital expenditure related to the promoting of equitable access to water, meeting international obligations and dam safety betterments on State owned dams will qualify for State funding. New infrastructure development may have a social as well as a commercial component in which case State funding and related charges will apply on the social component, while loan funding and related charges will apply on the commercial component.

There may be instances when the state will develop water infrastructure in the expectation of promoting economic development. In these instances social users will be charged in terms of on-budget governmental funding, while a rate equivalent for off-budget funding will be negotiated with economic users. The classification of a project will be at the sole discretion of the Minister of Water Affairs and Forestry.