Memorandum to the Minister of Water and Sanitation

Ministerial Memorandum #1

Subject: Raw Water Pricing Tariffs for 2023/4

1. Purpose

The purpose of this memorandum is to advise the Minister with respect to the approval of the proposed 2023/24 raw water tariffs and to make recommendations for improvement to the raw water setting process in future years.

2. Mandate and limitations

The Water Regulator Commission was recently established in terms of Section 99 of the National Water Act and Section 76 of the Water Services Act with purpose of providing strategic regulatory expertise, best practice insights, advice and guidance on the activities of the regulatory programme, with an initial focus on economic and social regulation of the water sector.

The Water Regulator Commission reviewed the proposed 2023/4 raw water tariffs. There are 557 individual scheme-level tariffs. The Commission had sight of some of the actual tariff calculations made for individual schemes but was not able to assess the process for verifying tariffs. The Commission is not in a position to approve individual tariffs as this is not in its mandate.

3. Tariff proposals

All tariff proposals are at or below the Producer Price Index. Tariff increases for raw water infrastructure development for the 339 tariffs for industry and domestic, and 218 tariffs for irrigation were limited to 13.1%, and ranged from 0% to 13.1%. Tariff increases are proposed to be zero (no nominal increase) for a large share of scheme-level tariffs, as follows:

- 124 of the 339 scheme-level tariffs (37%) for industry and domestic use.
- 82 of the 218 scheme-level tariffs (38%) for irrigation.

In these cases, the rate of cost-recovery is declining and moving in the opposite direction to that intended in the Raw Water Pricing Strategy, that is, to be moving towards cost-recovery

Most irrigation water remains inexpensive. The proposed raw water tariff is less than 10 cents per kl in nearly half of all irrigation schemes (44% or 96 schemes) and is less than 50 cents per kl in 90% of schemes (197 schemes). These costs are a small fraction of the total input costs for irrigation

The proposed tariffs for water resources management are low and affordable. The ranges in the proposed tariffs for water resources management, by user category, are as follows:

User category	**Low** cents per kl	**High** cents per kl
Domestic & industrial	1.75 c/kl	5.86 c/kl
Irrigation	1.06 c/kl	3.81 c/kl
Forestry	1.54 c/kl	2.71 c/kl

For a typical domestic household, using 20 kl per month (110 liters per person per day for a family of 6), the proposed water resources management tariff is between 35 cents and R1.17 per month, a small fraction of the cost of providing water to a household. For a farmer, the proposed monthly cost would be between R7 and R24 per month per irrigated hectare, a small fraction of farm input costs.[1] A 13% increase translates to 15 cents per month for a typical domestic user and R3 per month per hectare for a typical irrigation farmer (for the highest proposed tariffs in each category).

4. Tabling of 2023/24 raw water tariffs

The Minister is required to table the raw water tariffs for 2023/24 in Parliament by the 30 September 2022. The proposed tariffs have been through a process of consultation. The Minister has discretion to:

(1) table the tariffs as proposed by the Department,

(2) not approve and not table the tariffs; or

(3) direct that the tariffs be revised.

Option 3 is not practical within the time constraints required in law leaving only Options 1 and 2. Option 2 will result in no tariff adjustments for the 2023/24 financial year. This will have a substantially negative effect in the financial viability of key sector institutions, undermine the ability of the sector to undertake much needed investments, and have a substantially worse outcome for the sector compared to Option 1. Option 2 is therefore not recommended.

The Commission recommends:

- that the Minister table the proposed tariffs in parliament,
- note the limitations of these tariff proposals as set out below, and
- support the recommendations for improvements in the process to set tariffs in future years as set out below.

5. Limitations

While the 2023/4 raw water tariff proposals do not advance the sector towards cost recovery and financial sustainability, failure to approve the proposed tariffs would result in a substantially worse outcome. 37% of the tariffs are proposed to have a zero increase, and thus move these schemes further away from the goal of cost recovery and financial sustainability. There is a gap of R2.1 billion between the projected revenue from the proposed tariffs and the amount required to fully recover costs.
The analysis shows that the amount of money available for investment in infrastructure will decrease by nearly 10% in 2023/4 (in real terms) compared to that budgeted for in 2022/3.

The way the pricing strategy has been implemented over the past number of years, including the current proposal, has contributed to significant underinvestment in water infrastructure and to a deterioration in asset conditions and reliability of supplies. Failure to apply cost recovery pricing has resulted in a revenue loss to the sector of at least R20 billion over 10 years. This is money that could and should have been available for investment in infrastructure.

The raw water pricing strategy applies only to the economic use of water. A range of measures are in place to support the Pricing Strategy's social equity objective, and these are described in the Supporting Report below. **Beyond these specific targeted measures, keeping water prices below cost does not support the social equity objective. Tariff subsidies (keeping tariffs below cost) that are broadly applied to**

[1] The average water use by irrigated in South Africa is about 7 700 kl per hectare per year.

contribute to social equity, have a dire consequence of undermining the financial sustainability of the water sector.

Several factors contribute to this overall poor outcome. These are elaborated in the supporting document and summarized below:

- **The tariff proposals are poorly framed**. It is hard for stakeholders to understand the significance and impact of the proposed tariffs in the way they are presented. No distinction is made between schemes (for example, in terms of size and economic significance). The impact on individual users is not quantified and put in the context with overall input costs. A zero tariff increase represents a real decrease in the tariff and moves the sector further away from financial sustainability. A zero tariff increase means the sector will have to cater for higher tariffs in years to come, in order to offset worsening infrastructure and consequently higher investment needs.
- **Raw water tariffs suffer from a problem of legitimacy.** This is a result of the poor financial management of the Water Trading Entity, the inability to spend budgeted amounts, and low levels of transparency. Users have little knowledge and confidence in how and where their money is spent.
- As a result, there appears to be a **reduced willingness to pay** in a context where users have little confidence that their payments are being effectively used to address sector challenges.
- **Low payment levels** have been allowed to persist without consequences, therefore undermining the willingness of 'users who continue to pay' and inadvertently creates a negative impact on the entire system.
- There appears to be an **absence of any mechanism to check and verify the proposed tariffs**, the data and assumptions used in the calculation, and the accuracy of the calculations themselves.

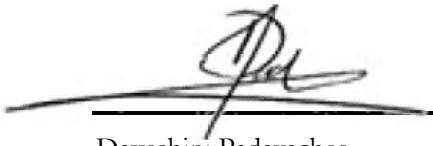
6. Recommendations for improvements to tariff setting process in future years

1. **Indexed tariffs**. Tariffs need to be indexed to inflation and tariff increases presented net of inflation. That is, if inflation is 5%, all tariffs should increase by at least 5% (this is a neutral or zero increase) and a 6% tariff increase should be presented as a 1% real increase.
2. **Simplify capping**. The application of price caps is complex and opaque. The system needs to be simplified and clearly communicated through national engagement process.
3. **Multi-year price path**. It is onerous to review and consult on 557 tariffs every year. It is strongly recommended that Tariffs and a price path should be agreed for a period of a minimum of three years (ideally longer).
4. **Agreed time period to reach target cost-recovery level**. There needs to be a clear commitment to achieving the target cost-recovery goal within an agree time period.
5. **Improve transparency**. A strong recommendation is made for the Minister to accelerate the establishment of the national water resource infrastructure agency and the catchment management agencies. Audited Financial statements of these entities (and for the department itself) need to be published timeously. Data on budgets and actual expenditure and revenues by water resource management area, and by scheme (especially for the major schemes) need to be published.
6. **Improve presentation of tariffs**. Tariffs should be presented in categories in terms of the economic significance and scale of the scheme, and also communicated in the context of inputs costs to users. (Raw water costs are often a very small fraction of total input costs for a user. This should take out the heat from tariff proposals.)

7. **Attend to non-payment**. The sector has unsustainable debt, and this debt is increasing. An agreement must be reached on a debt write-off in return for clear, enforceable commitments to payment (and clearly specified consequences of non-payment).
8. **Improve process**. The current process is too rushed and does not allow adequate time for analysis, review, verification and consultation. The process needs to be revised and improved. This will be easier if a multi-year price path (as per #3 above) is agreed so that tariffs do not have to be approved every year.
9. **Improve methodology and set out in a manual**. The price setting methodology is not clearly specified and is not set out in a written document. It is overly complex, not transparent and at risk of being implemented with errors. A manual is needed to guide an improved, simplified and more robust tariff setting process.

Where the Minister accepts the recommendations of the Commission, the Commission will do further work to elaborate on, and guide the implementation of, these recommendations.

Signed



Daveshini Padayachee

Chairperson, Water Regulatory Commission

for the Water Regulatory Commission

Date: 19/09/2022

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Supporting report

Report in support of Ministerial Memorandum #1: Raw Water Pricing Tariffs 2023/4

1 Background

The Water Regulator Commission was established in terms of Section 99 of the National Water Act and Section 76 of the Water Services Act. The purpose of the Water Regulator Commission is to provide strategic regulatory expertise, best practice insights, advise and provide guidance on the activities of the regulatory programme, with an initial focus on economic and social regulation of the water sector. The scope of work of the Regulatory Commission includes the provision of advice, guidance and recommendations with respect to raw water pricing in terms of the Raw Water Pricing Strategy.

2 Purpose

The purpose of this briefing note is to advise the Minister on the proposed 2023/24 raw water tariffs and to make recommendations for improvements to the process going forward.

The Commission had its inception meeting on 10 August 2022 and the Commission received a briefing from the Department on the proposed raw water tariffs on 5 September 2022. The Commission has had sight of a selection of tariff proposals made by the CMAs (or proto-CMAS) for water resource management charges, and by the departmental clusters for water resource development (infrastructure) tariffs. Some key resource documents were made available. These included the approved Raw Water Pricing Strategy (2007) and the circular "Economic and Regulatory Requirements for the 2023/4 raw water use cycle and beyond" (ESR Circular 1 of 2022, dated 7 April 2022).

Limitations

Although the Commission has sight of some tariff calculations it was not able to assess the verification process. Asset values, which form the basis of the depreciation and return on asset calculations were not reported. Additionally, no information on the rate of return and depreciation assumptions or calculations were provided. The above-mentioned circular sets out the process and consultation requirements, and provides templates for tariff proposals for water resource management and water resource development charges respectively. Beyond this there is no guideline or manual to guide the tariff setting process.[2] The quality of the proposals reviewed were mixed and did not, in the view of the Commission, provide a sound basis on which tariff proposals could be approved or not.

3 Pricing objectives

The raw water pricing proposals for 2023/24 are made in terms of the approved 2007 Raw Water Pricing Strategy. The strategy identifies four key pricing objectives: social equity, ecological sustainability, financial sustainability and economic efficiency, and it is important to understand the 2023/24 pricing proposals in relation to these objectives, which are summarized below. It is important to understand the proposed tariffs in light of these objectives.

The 2007 strategy forms the basis of the currently tabled Raw Water Tariffs. The content that follows makes reference to the 2007 and 1999 Raw Water Pricing Strategies. A draft revised Raw Water Pricing Strategy was gazetted for consultation in August 2022. Comments on the revised strategy will be provided in a separate briefing to the Minister.

[2] The Circular referenced above sets out information to be provided in tariff proposals, and provided templates for tariff proposals to be made to the regulator (DWS), but does not provide specific guidance with respect to how to calculate the depreciation, return on assets and to apply the capping as provided for in the 2007 Strategy.

3.1 Social equity objective

The approved 2007 Pricing Strategy states that "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."

All "non-economic" use of water is exempt from water pricing. Non-economic use is defined as:

- water for basic human needs;
- all schedule 1 water use;[3]
- water required for the ecological reserve, to protect the aquatic ecosystems of the water resources and ensure their sustainability;
- water required to meet South Africa's commitments regarding international waters;

After the above claims have been met, the remaining water, including water imported from other water management areas by means of inter-basin transfer schemes, can be made available for various uses. **This water use is classified as productive use of water** ("economic use") **and is subject to pricing in terms of the raw water pricing strategy.**

In addition to the above, social equity objectives are met in the following ways:

- the **equitable share** supports to provision of a basic water and sanitation service to poor households;
- various **capital grants** (such as the Municipal Infrastructure Grant) support the provision of infrastructure necessary to support the above;
- Support to **resource poor farmers**[4] provided through the land reform programme and other mechanisms not identified below;
- **Resource poor foresters and non-irrigation growers** with land equal to or less than ten hectares under cultivation are exempt from the water resources management charge related to stream flow reduction activities. WRM charges for resource poor farmers and resource poor 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. The subsidy comes into effect on the date of registration of water use by individual resource poor farmers or resource poor forest growers.
- For the **agricultural sector as a whole**, return on asset (ROA) charges as per the 1999 Pricing Strategy would not be applied to existing state irrigation schemes. These charges will also not be applicable to resource-poor farmers for existing schemes and new schemes constructed as part of the Water Allocation Reform programme. ROA will however be applicable for new government schemes constructed for established commercial farmers.

[3] The 2007 raw water defines this as follows: "A person may use water in or from a water resource for purposes such as reasonable domestic use, non-commercial gardening, animal watering, fire-fighting and recreational use, as set out in Schedule 1 of the National Water Act."

[4] Resource Poor Farmers/Forest growers are defined in the 2007 Raw Water Pricing Strategy as "entry-level water users who are citizens of South Africa and who are members of the historically disadvantaged population groups."

- For categories of **resource poor farmers and established farmers**;-

For **resource poor farmers,** the water resources development charge (consumption charges) are subject to the following: o phased in over five years from date of registration of the relevant water use; o depreciation charges will be waived for five years from the date of registration of water use; thereafter charges will be capped at 1.5 cent per meter^3 plus PPI (rate) with 2007/08 as base year, o increases will be limited to 20% of the previous year's charge. o Capital cost for new development will be subsidised by the fiscus. o Further waiving of charges will be considered for a limited time period on request by other relevant Departments, for example, where land and agricultural reform programmes are involved. **Resource-poor irrigation farmers** ***Water Research Charge:*** o will be exempt from the payment of water-research charges for an initial introductory period of five years or as otherwise negotiated.	For **established farmers** o operation and maintenance charges will be phased in over five years from date of registration of the relevant water use; o depreciation charges will be waived for five years from the date of registration of water use; o thereafter charges will be capped at 1.5 cent per meter^3 plus PPI (rate) with 2007/08 as base year, increases will be limited to 20% of the previous years charge. Full financial cost recovery including ROA for new schemes.

Beyond these measures, it is important to note that keeping water prices below cost does not serve the social equity objective and that broadly applied tariff subsidies undermine the financial sustainability of the water sector. (See financial sustainability objective below.)

3.2 Ecological sustainability objective

The National Water Act states that the water needs for the effective functioning of aquatic ecosystems must be protected, and the mechanisms to achieve this include the designation of an ecological reserve (water than cannot be abstracted) and adoption of the polluter pays principle. The 2007 Pricing Strategy states that cost of managing an ecological Reserve must be paid for by all registered and billable users and further provides for the implementation of a waste discharge charge to give effect to the polluter pays principle.

It is important to note that the financial cost of managing the ecological reserve is very low in relation to the overall water resource management and infrastructure costs recovered by raw water tariffs. **The same cannot be said for the impact of pollution**.

3.3 Financial sustainability objective

The currently approved 2007 Raw Water Pricing Strategy has the following pricing objective:

"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, refurbishment and betterment of existing Government water schemes and waterworks owned by water management institutions, and the development of new user-funded schemes.

The financial framework makes accommodation for the financial autonomy of WUAs and 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 it is important to keep water prices as low as possible, [DWS] 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."

This objective was an elaboration of a similar objective in the first raw water pricing strategy (1999) which stated that "the methods that have been used by [DWS] to finance major bulk raw water schemes in the past are not financially sustainable for a number of reasons. First, inflation was not taken into account, resulting in a decline in the value of tariffs over time in real terms. Second, no provision was made for refurbishment. And third, no provision was made for asset replacement." The strategy noted that "a new financial framework is required to accommodate the water sector's increased need to be financially autonomous, to attract greater contributions to its development from the private sector, and to be financially accountable and sustainable." The 1999 strategy proposed that "**the full financial cost of supplying water should be recovered from water users, including the cost of capital**. The new approach would however, be phased in by taking account of the constraints within various user sectors to adapt quickly to price increase."

This approach was only to be applied to the **economic** use of water, and exempted the following from cost-recovery pricing: Schedule 1 use, water for basic human needs, water for the ecological reserve, and international obligations.

The objective was to reach the target cost-recovery level within 10 years (from 2000), limiting increases to PPI + 10% until cost recovery had been achieved and thereafter to PPI.

3.4 Economic efficiency objective

The 2007 Strategy notes that, 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; and that this can be done administratively or by using market related mechanisms. No explicit pricing mechanism to reflect the intrinsic scarcity value of water has been implemented to date.

The 2007 Strategy also notes that **water resource management systems need to be cost effective** so as not to impose an unnecessary financial burden on water users.

4 Comment on proposed raw water tariffs for 2023/4

4.1 The imposed price cap differs from that set in the approved pricing strategy

Whereas the 2007 Raw Water Strategy sets a price cap of PPI + 10% for industrial and domestic tariffs and a price cap of PPI + 50% for irrigation tariffs, the proposed tariffs applied a price cap of PPI (as at the month of April 2022), being 13.1%.

The Department has proposed raw water tariff increases (for both water resources management and infrastructure) in the range of 0 to 13.1 percent.

A note on inflation and cost recovery

Inflation causes the value of money to decrease over time. This means that R11 today is only worth what R10 would have bought a year ago (if inflation was 10% over the last twelve months).

If water tariffs are adjusted by an amount which is below the level of inflation, this means that the money available to the sector is decreasing in real terms, that is less can be done with the money (compared to the previous year).

Therefore, at a minimum, all tariffs should be indexed to inflation, that is, all tariffs should be adjusted by at least the level of inflation.

The 2007 Raw Water pricing strategy uses the Producer Price Index (PPI) as the indexed for inflation. The merits of this and how it is applied will be reviewed by the Commission in its submission on the draft Raw Water Pricing Strategy gazette for public comment.

4.2 Proposed water resource management tariffs

Water resource management tariffs are intended to cover the costs of those activities that are required to protect, allocate, conserve, manage and control the water resources and manage water quality located within Water Management Areas.

The proposed water resource management tariffs are summarized below:

DESCRIPTION		APPROVED TARIFFS 2022/23 FY			PROPOSED TARIFFS 2023/24 FY			% INCREASE on CHARGES		
#	9 CMA / PROTO CMA's	DOMESTIC & INDUSTRIAL	IRRIGATION	FORESTRY	DOMESTIC & INDUSTRIAL	IRRIGATION	FORESTRY	DOMESTIC & INDUSTRIAL	IRRIGATION	FORESTRY
		c/m3	c/m3	c/m3	c/m3	c/m3	c/m3	%	%	%
1	Limpopo-NorthWest	4.80	3.37	2.65	4.80	3.81	2.65	0.0%	13.1%	0.0%
2	Olifants	4.41	2.88	2.43	4.41	3.26	2.47	0.0%	13.1%	1.8%
3	Inkomati-Usuthu	4.13	2.09	1.66	4.67	2.37	1.83	13.1%	13.1%	10.3%
4	Pongola-Mzimkulu	3.23	2.04	1.89	3.38	2.30	2.01	4.6%	13.1%	6.3%
5	Vaal	2.87	2.14	2.43	2.87	2.43	2.43	0.0%	13.1%	0.0%
6	Orange	1.74	1.06	-	1.75	1.06	-	0.5%	0.0%	0.0%
7	Mzimvubu-Tsitsikama	4.04	2.71	2.40	4.16	3.07	2.71	2.8%	13.1%	13.1%
8	Breede-Gouritz	5.51	2.66	1.36	5.63	3.00	1.54	2.2%	13.1%	13.1%
9	Berg-Olifants	5.79	2.50	2.44	5.86	2.82	2.76	1.2%	13.1%	13.1%

The ranges in the proposed tariffs, by user category, are as follows:

User category	**Low** cents / kl	**High** cents / kl
Domestic & industrial	1.75 c/kl	5.86 c/kl
Irrigation	1.06 c/kl	3.81 c/kl
Forestry	1.54 c/kl	2.71 c/kl

The proposed tariffs for water resources management are low and affordable

For a typical domestic household, using 20 kl per month (110 liters per person per day for a family of 6), **the proposed water resources management tariff is between 35 cents and R1.17 per month**, a small fraction of the cost of providing water to a household. For a farmer, **the proposed monthly cost would be between R7 and R24 per month per irrigated hectare**, a small fraction of farm input costs.[5]

A 13% increase translates to 15 cents per month for a typical domestic user and R3 per month per hectare for a typical irrigation farmer (for the highest proposed tariffs in each category).

4.3 Proposed water resource development tariffs (for infrastructure)

Basis for setting tariffs

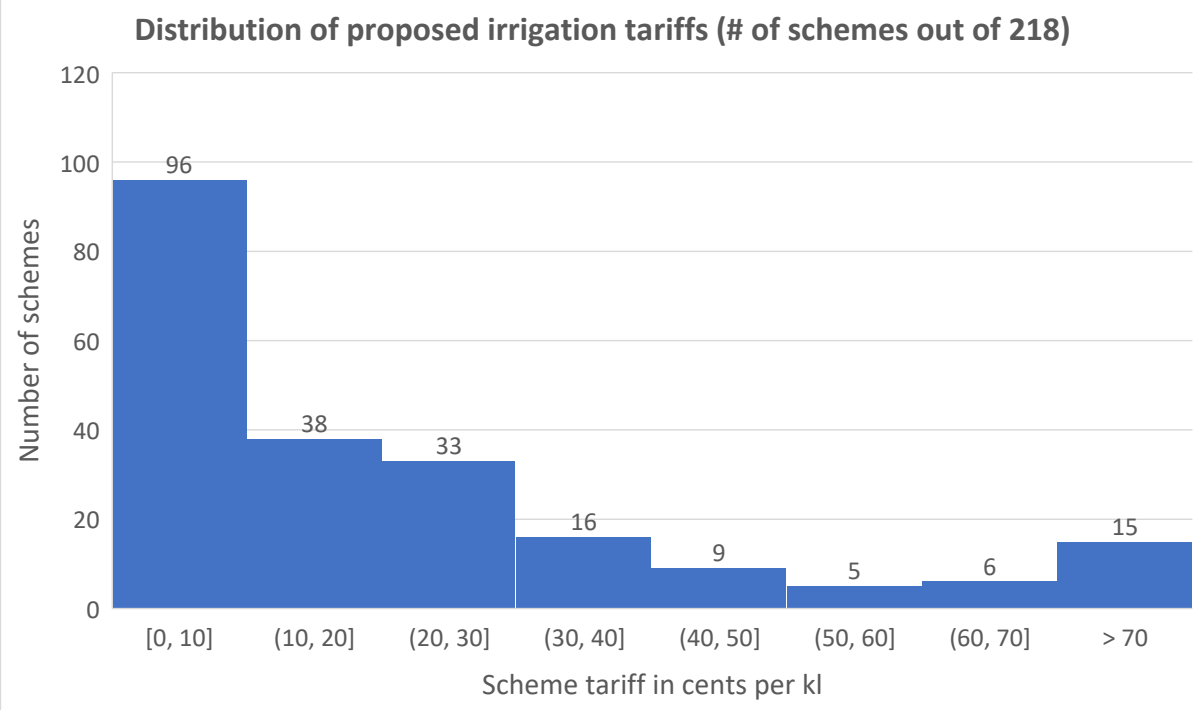
Water resource development tariffs are calculated as the sum of operating and maintenance costs, depreciation and return on assets.

Tariff increases

There are 557 scheme-level tariffs for raw water infrastructure, comprising 339 tariffs for industry and domestic, and 218 tariffs for irrigation. Tariff increases for raw water infrastructure development were limited to 13.1%, and ranged from 0% to 13.1%.

Most irrigation water remains inexpensive

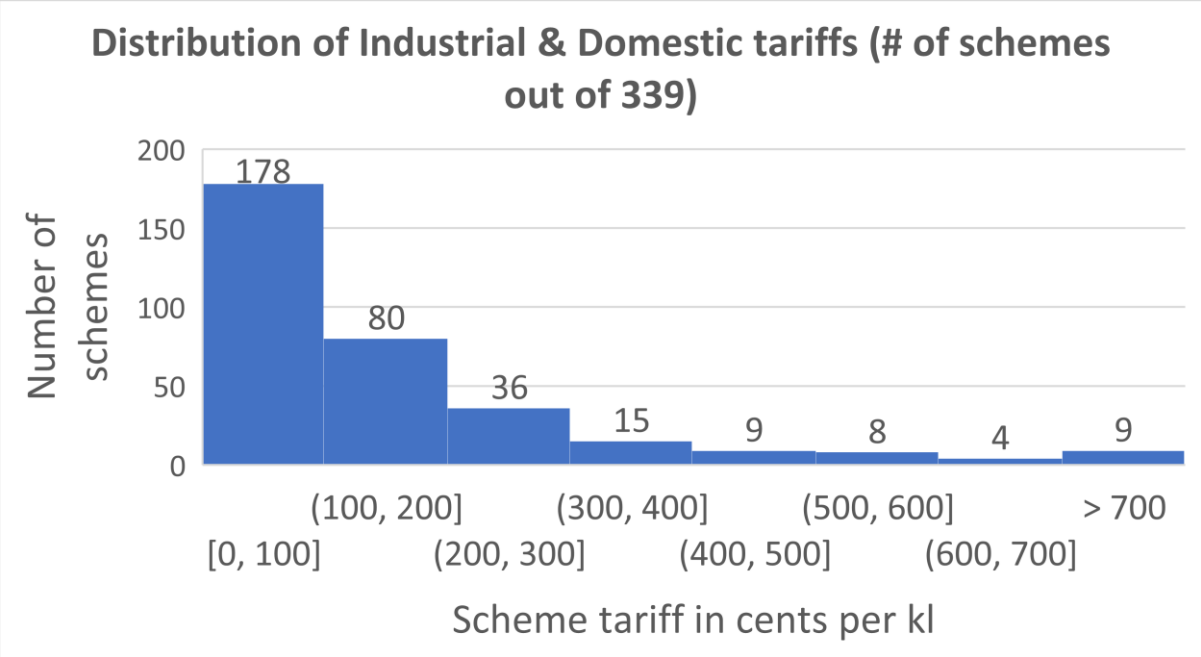
The proposed raw water tariff is less than 10 cents per kl in nearly half of all irrigation schemes (44% or 96 schemes) and is less than 50 cents per kl in 90% of schemes (197 schemes). These costs are a small fraction of the total input costs for irrigation.



Most raw water tariffs for industry and domestic use remain inexpensive

The raw water tariff for industry and domestic is less than R1 per kl in 53% (178) schemes, and less than R5 in 94% (318) schemes. These costs are a small fraction of total infrastructure and/or input costs for domestic and industrial use.

[5] The average water use by irrigated in South Africa is about 7 700 kl per hectare per year.



4.4 The level of cost recovery is declining

Tariff increases are proposed to be zero (no nominal increase) for a large share of scheme-level tariffs, as follows:

- 124 of the 339 scheme-level tariffs (37%) for industry and domestic use.
- 82 of the 218 scheme-level tariffs (38%) for irrigation.

In these cases, **the rate of cost-recovery is declining and moving in the opposite direction to that intended in the Raw Water Pricing Strategy**, that is, to be moving towards cost-recovery.

4.5 Overall financial implications of proposed tariffs

The 1999 Raw Water Pricing Strategy had a goal to achieve target cost recovery tariffs over a period of 10 years, with irrigation exempted from a rate of return on assets component.

It is now 22 years since the implementation of the cost recovery policy and the sector is still far from achieving cost recovery.

The proposed tariffs will generate a billed revenue of R4.95 billion for 2023/4. If full cost pricing were to be applied, R7.05 billion of revenue would be generated. The failure to apply full cost pricing, after 22 years of implementing a full cost recovery policy (with an intended 10-year ramped implementation from the year 2000) will result in a revenue loss of R2.10 billion for the year. **The failure to apply cost-recovery pricing to the economic use of water represents a loss of funds to invest in the water sector of at least R20 billion over the last ten years**.

The way the pricing strategy is implemented is contributing to significant underinvestment in water infrastructure and to a deterioration in asset conditions and reliability of supplies, at the same time as there is an increasing need for investment as the result of economic and population growth as well as climate change.

The analysis shows that the amount of money available for capex will decrease by nearly 10% in 2023/4 (in real terms) compared to that budgeted for in 2022/3. At the same time, there is a real increase of 12.9% in the operations and maintenance budget, and a 0.4% real increase in total revenue. See Table 1.

Table 1: Real increase (net of inflation) in operations and maintenance and total revenue budgets

	21/22	22/23	23/24
O&M budget	-1.7%	-2.3%	12.9%
Available for CAPEX	-0.5%	2.6%	-9.6%
Total revenue budget	-1.0%	0.3%	0.4%

4.6 Increase in sector debt

The situation is worse than the revenue figures suggest. The amount of money owed to the Water Trading entity by water uses has increased substantial during the last few years.[6]

Without addressing the issue of payment, the billed revenue will not translate into cash available for investment. The data suggests that no money was available for investment in the previous financial year because the increase in sector debt exceeded the budgeted revenue contribution from tariffs to investment (from the depreciation and return on asset charges).

5 Comments on tariff setting and related processes

It is likely that the act of making, or not making, water use charges constitutes a decision of an administrative nature (the implementation of government policy by applying legislation) and will thus trigger the right to be reviewed under the Promotion of Administrative Justice Act No. 3 of 2000 (PAJA) if it adversely affects the right of a person. See Annexure 1.

There are a number of factors that contribute to the poor outcomes highlighted above. These are elaborated below.

5.1 Framing

The proposed tariffs are poorly framed in at least three important respects:

1. The **water resource management charges** are low and affordable. The water resource management charge needs to be framed in the context of the very small contribution they make to overall input costs (in the case of industry and irrigation) and to household budgets (in the case of domestic use).
2. **Tariff increases should be reported as real increases (or decreases), that is, net of inflation**. Any tariff increase that is below CPI or PPI will, in effect, result in a reduction in the cost of water in real terms. A tariff increase at CPI or PPI is in effect a zero real increase, and any increase below that is a negative real increase. These should be stated as such.
3. **The tariff proposals do not distinguish between the types of scheme and the purposes for which the water is used (and associated economic value)**. There is a vast range in both the scale and the value contribution of water across schemes, between, for example, small schemes supplying water to economically marginal emerging farmers and water supplied through Rand Water to South Africa's economic heartland, accounting for more than half of South Africa's GDP. It would be helpful to present the tariffs in appropriate groupings of schemes, paying much more careful attention to the tariffs for nationally and economically significant schemes.

[6] Details were requested by the Commission but not made available by the Department.

5.2 Legitimacy

Raw water prices suffer from a problem of legitimacy.

The Department has not yet published its **annual report and annual financial statements** for the financial year ending 31 March 2021 (2020/1). (The Department was required to table its Annual Report and AFS in parliament by September 2021.)

The revenue from the raw water tariffs goes to the **Water Trading Entity**. This entity has suffered from poor financial management during recent years. The Water Trading Entity was unable to spend its budget in 2019/20 by a significant amount, and the Entity suffered from liquidity problems, being unable to meet its short-term financial obligations.

Although the Water Trading Entity reported a large operating surplus in 2019/20, this did not translate into maintenance and capital spending. The Department did not have a maintenance contract in place and low levels of payment meant it did not have cash to invest in infrastructure.

5.3 Transparency

There is a low level of transparency. Users have little knowledge and confidence in how and where their money is spent. The pricing proposals are based on budgets, but there is a lack of reporting on actual expenditure against budget, particularly at a scheme level. Users who are asked to pay for the cost of the scheme want to have confidence that an appropriate amount of money is spent on maintaining and rehabilitating the water infrastructure they are dependent on. There is little reason for uses to have such confidence at the moment.

5.4 Willingness to pay in context of declining state of infrastructure

As a result of a lack of adequate spending on maintenance and rehabilitation, the state of water resources infrastructure is generally in decline and in a poor state of repair across South Africa. There appears to be a reduced willingness to pay in a context where users have little confidence that their payments are being effectively used to address this challenge.

5.5 Accountability

Levels of accountability across the system are low.

Water resource management charges and activities: Users are unable to trace a relationship between their water resource management charges and activities, as revenue goes into a general revenue fund i.e. lack of ring-fencing. The catchment management agencies (CMAs) should be accountable to water users in how the resources from the water resource management charge are used. In the absence of established CMAs, this accountability is diffuse or even non-existent.

Scheme level revenues, expenditure and performance. There is no tracking of revenue and expenditure at a scheme level, together with scheme-level 'performance' (status of infrastructure, risks etc.). While this may be less practical in the case of the many small schemes, these items should be tracked for at least the nationally significant and strategic schemes, on which South Africa's economy is highly dependent. Critical risks exist across the system and activities to address these do not appear to be systematically tracked, at least in a way that is transparent to water users.

Accountability for expenditure against budget. More generally, accountabilities for expenditure against budget appears to be weak and needs improvement.

Accountable to collecting revenue. There appears to be low levels of accountability for the collection of revenues due from the application of raw water tariffs. Low payment levels have been allowed to persist without consequences, therefore undermining the willingness of 'users who continue to pay' and inadvertently creates a negative impact of the entire system. Financial sustainability of key institutions in

the sector such as the Water Trading Entity, TCTA and the water boards, contribute in a significant manner to the declining state of water resources infrastructure in South Africa.

5.6 Absence of verification

There appears to be an absence of any mechanism to check and verify the proposed tariffs, the data and assumptions used in the calculation, and the accuracy of the calculations themselves. In this context, it is very likely that the tariff proposals contain errors.

5.7 Ability to spend

There is a disconnect between the (accounting) revenue raised through the tariffs and the department's ability to spend its budget. Actual expenditure is well below budgeted expenditure and this underline the legitimacy of the revenue raising system and the setting of tariffs.

5.8 Process timing

It is understood by the commission that the process timing does not support effective review of the proposed tariffs.

6 Recommendations

Recommendations to improve the tariff setting process are set out in the Memorandum to the Minister: Ministerial Memorandum #1: Raw Water Pricing Tariffs 2023/4.

Annexure 1: The Promotion of Administrative Justice

The Promotion of Administrative Justice Act No. 3 of 2000 (PAJA) gives effect to the right to administrative action that is lawful, reasonable and procedurally fair and to the right to written reasons for administrative action as contemplated in section 33 of the Constitution of the Republic of South Africa, 1996.

In setting tariffs or charges, the Minister (for national and regional charges) and the water management institution (for a specific water management area) must thus act as empowered in terms of the legislation and policies issued by the legislature, and the decision must be reasonable and procedurally fair.

Section 6(2) of PAJA sets out when a court or tribunal has the power to judicially review an administrative action, being if—

(a) the administrator who took it—
    (i) was not authorised to do so by the empowering provision;
    (ii) acted under a delegation of power which was not authorised by the empowering provision; or
    (iii) was biased or reasonably suspected of bias;
(b) a mandatory and material procedure or condition prescribed by an empowering provision was not complied with;
(c) the action was procedurally unfair;
(d) the action was materially influenced by an error of law;
(e) the action was taken—
    (i) for a reason not authorised by the empowering provision;
    (ii) for an ulterior purpose or motive;
    (iii) because irrelevant considerations were taken into account or relevant considerations were not considered;
    (iv) because of the unauthorised or unwarranted dictates of another person or body;
    (v) in bad faith; or
    (vi) arbitrarily or capriciously;
(f) the action itself—
    (i) contravenes a law or is not authorised by the empowering provision; or
    (ii) is not rationally connected to—
        (aa) the purpose for which it was taken;
        (bb) the purpose of the empowering provision;
        (cc) the information before the administrator; or
        (dd) the reasons given for it by the administrator;
(g) the action concerned consists of a failure to take a decision;
(h) the exercise of the power or the performance of the function authorised by the empowering provision, in pursuance of which the administrative action was purportedly taken, is so unreasonable that no reasonable person could have so exercised the power or performed the function; or
(i) the action is otherwise unconstitutional or unlawful.

The Commission will work with the department to reflect on, and develop guidelines for, the procedural requirements and supporting information required to inform lawful and reasonable decision making related to the raw water tariff determination process). In the longer term, the Commission aims to set the foundation for decision making to ensure implementation of sustainable investment to ensure outcomes are achieved., including the monitoring and enforcement of collection of charges and how revenue from these charges is used.

Memorandum to the Minister of Water and Sanitation

Ministerial Memorandum #1

Subject: Raw Water Pricing Tariffs for 2023/4

Annexure 2: Water Sector Debt

The level of sector debt is increasing and is unsustainable. As at 30 August 2022, R25 billion was owed to the Water Trading Entity. Of this, R21 billion was debt older than 180 days, and much of this is likely to be uncollectable (Table 2.1).

Table 2.1 Total customer debt owed to WTE (30 August 2022)

	0-60 days	61-179	180+	Total
Government (nat and prov)	2	23	341	**366**
Individual & companies	**388**	**210**	**4 937**	**5 535**
Irr boards and WUA	**41**	**197**	**2 102**	**2 340**
Municipalities - DM	*123*	*107*	*2 070*	**2 299**
Municipalities - LM	*210*	*168*	*5 926*	**6 304**
Municipalities - Metro	*61*	*57*	*54*	**172**
	394	**332**	**8 050**	**8 776**
Water boards	**1 926**	**584**	**5 899**	**8 409**
TOTAL	2 752	1 345	21 328	25 425
	11%	5%	84%	

Debt owned by water boards and municipalities to the Water Trading Entity has been increasing significantly each year over the last five years, by between R1.2 billion and R3 billion per year (Table 2.2). These are resources that should be available for much needed investment in water infrastructure.

Table 2.2 Historic growth in debt (amounts owed by water boards and municipalities to WTE)

WTE debt as at	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Aug-22
Water boards (WB)	2 969	3 625	5 037	5 484	6 832	8 409
Local Municipalities	2 510	2 867	3 586	4 102	5 384	6 304
District Municipalities	1 112	1 260	1 567	1 712	1 916	2 299
Metro Municipalities	33	50	52	134	265	172
Grand Total	**6 624**	**7 802**	**10 243**	**11 432**	**14 397**	**17 185**
		1 177	2 441	1 189	2 966	2 787
		18%	31%	12%	26%	19%

Efforts to date to address this serious and unsustainable situation have not born fruit. A debt write-down within a firm and a strongly enforceable and enforced agreement for full payment of current debt, together with a proportion of older debt, should be considered.