

Memorandum to the Minister of Water and Sanitation

Ministerial Memorandum #3

Subject: Water board tariffs for 2023/24

(Editorial notes: This draft, dated 22 March 2023, includes amendments to recommendations based on RC feedback on 8 March and a cost driver analysis for Umgeni Water. Data for Umgeni has been updated in Table 6 (to reflect bulk water revenue only). The report was circulated to DWS on 9 March. Feedback and verification of the data has not been received to date.)

1 Background and purpose

The Regulator Commission was established in terms of Section 99 of the National Water Act No 108 of 1997 and Section 76 of the Water Services Act No 108 of 1997 with the purpose of advising the Minister on aspects related to the economic and social regulation of the water sector

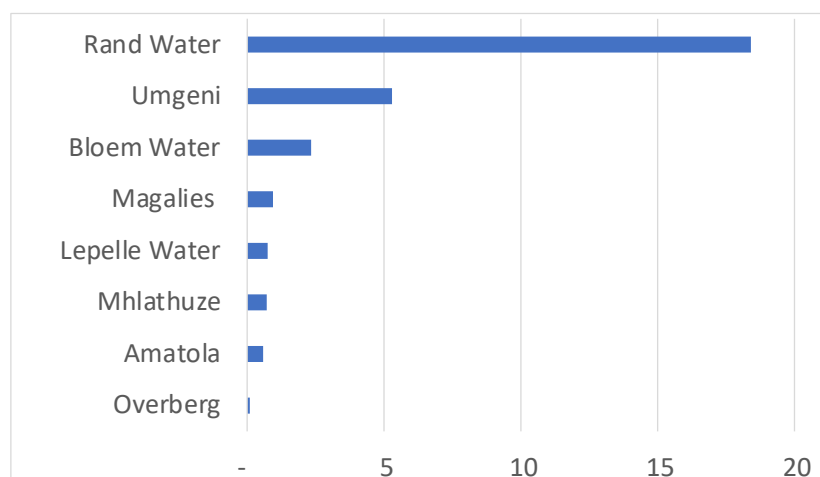
The purpose of this memorandum is to brief the Minister on the water board tariff proposals for 2023/4 and to make recommendations with respect to what is proposed by the water boards and the Department, and on future ways to improve the robustness and integrity of the tariff review process.

2 Context

2.1 The economic significance of the water boards

Water boards play a critical role in providing bulk water to municipalities and industry, in supporting municipalities to provide water services. The scale of operations amongst South Africa’s current water boards differs significantly from Rand Water with an annual revenue of R17, 7 Billion to Overberg with an annual revenue of R60 Million, as shown in Figure 1.

Figure 1: Water board annual revenue in Rand billion (2022/3 forecast)



The key characteristics of each water board is summarized in Table 1. Due to their diversity, each water board should be assessed on its own merits but there are nevertheless common factors across these institutions.

Table 1: Key summary characteristics of Water Board clients and supply areas

Rand Water	Supplies water to municipalities, mines and industry in the Gauteng region (population about 14 million), the economic heartland of South Africa with about one third of South Africa's GDP. Its effective and efficient functioning is vital to South Africa's economic well-being.
Umgeni Water	Supplies water to eThekweni metro, surrounding municipalities and directly to rural communities. eThekweni metro (4.1 million people) is its major client accounting for 80% of Umgeni's water sales. The water business in eThekweni is in financial distress. The supply area includes a significant rural population.
Bloem Water	Supplies water to the Mangaung metro (population 0.9 million) and nine small towns in the Free State and Eastern Cape. The area is in economic decline and Mangaung is financially distressed and under administration. Bloem Water has recently taken over a portion of Sedibeng's operations after Sedibeng was closed down.
Magalies Water	Magalies Water has bulk water supply contracts with 7 municipalities (Bela-Bela, Tshwane, Modimolle, Moses Kotane, Rustenburg Local Municipality, Thabazimbi and Moretele Municipalities, the Royal Bafokeng Administration) and 15 industries and mines in the North West, Limpopo and Gauteng provinces. Magalies Water has recently taken over a portion of Sedibeng's operations after Sedibeng was closed down.
Lepelle Northern Water	Lepelle Northern Water provides bulk water services to five municipalities (Polokwane, Capricorn, Sekhukune, Waterberg and Mopani), operating 20 bulk water schemes. Many of these schemes supply water to predominantly rural populations.
Mhlathuze Water	Mhlathuze Water operates mainly in the uMkhanyakude, King Cetshwayo and Zululand districts and its major clients are the uMhlathuze municipality, Foskor, Richards Bay Minerals and Mondi. A core part of its business is the treatment of industrial waste.
Amatola Water	Amatola Water supplies bulk water to Buffalo City (population 0.7 million), its major client and also to Peddie, Komga, Stutterheim, Keiskammahoek, Middledrift, Victoria East and Ndlambe.
Overberg	Overberg Water is the smallest water board and distributes water to the non-urban areas of Cape Agulhas, Heidelberg and Caledon within the Hessequa and Theewaterskloof local municipalities.

Overberg, because of its very small size relative to the others, is excluded from the analysis that follows.

2.2 Financial viability and why this matters

The proposed tariff increases need to be understood within the context of the financial performance and viability of the water boards.

Water boards have two broad mandates:

- a **primary function** to supply bulk water to municipalities, industries and mines, and,
- a **secondary function** to provide services to water services authorities, supporting municipalities in their role of providing services, or providing water services on behalf of the water services authority.¹

The nature of these two businesses is different, and water boards are required by law to account separately for these two sets of activities.

In the case of the primary function, the water board is expected to fully fund the cost of sustainably providing the service from the tariff, including investment costs (less any explicit capital subsidies provided by the Department of Water and Sanitation). This means that water boards must generate an operating surplus that can be used to pay for investments (directly from cash and/or through loans).

In the case of secondary activities, these need to be fully recovered through the recovery of the costs from these activities (typically through a contractual arrangement with the entity benefiting from the service). Unless there is a long-term concession contract in place, these activities should not involve the Water board investing its own capital.

The financial performance and status of water boards are shown in Table 2.

Table 2: Financial performance and status of water boards (2021/2)

	Rand	Umgeni	Mhlthuze	Bloem	Magalies	Lepelle	Amatola
% surplus	20%	25%	24%	15%	15%	14%	-47%
Return on assets	9%	8%	8%	9%	3%	2%	-8%
Return on equity	11%	9%	10%	11%	4%	3%	-10%
Current ratio	2.78	6.56	2.39	3.11	2.20	1.79	1.36
Debtor days	61	83	70	149	238	523	212
Cash flow from operations (% of revenue)	15%	38%	57%	30%	23%	20%	-41%
Debt to equity	0.14	0.15	0.04	0.01	0.28	0.27	-

Source: Water Board Annual Financial Statements (2021/2)

¹ A water board may be directed to undertake tasks by the Minister of Water and Sanitation. In the case of directives, the resultant costs need to be paid for by the Department of Water and Sanitation. Secondary activities, including directives, need to be accounted for separately from the primary activities.

Note: Green indicates good performance, yellow moderate performance, and deeper shades poor or very poor performance.

Three water boards are financially strong: Rand Water, Umgeni Water and Mhlathuze Water. All generate healthy surpluses (20% or more), a reasonable return on assets (8% to 9%), a reasonable return on equity (9% to 11%), have good liquidity (current ratio above 2), strong positive cash flows and have been able to manage their customer debt at reasonable levels (less than 70 days).

In the case of **Umgeni and Mhlathuze**, it could be argued that their financial performance is **too strong**, and that, in the context of the actual performance on capital spending (see below), the **surplus is too generous**.

Three water boards are financially weak: Bloem Water, Magalies and Lepelle. While their surplus is reasonable (14% to 15%), they are highly vulnerable to growing customer debt of between 150 and 520 debtor days, that is between close to half of year and over a year and a half worth of revenue is owed.

The financial position of both Magalies and Bloem Water will be made more difficult by taking on the responsibilities of Sedibeng Water, which was in financial difficulties.

Amatola Water Board is in serious financial trouble, and made a very significant loss in 2021/2.

2.3 Capital expenditure

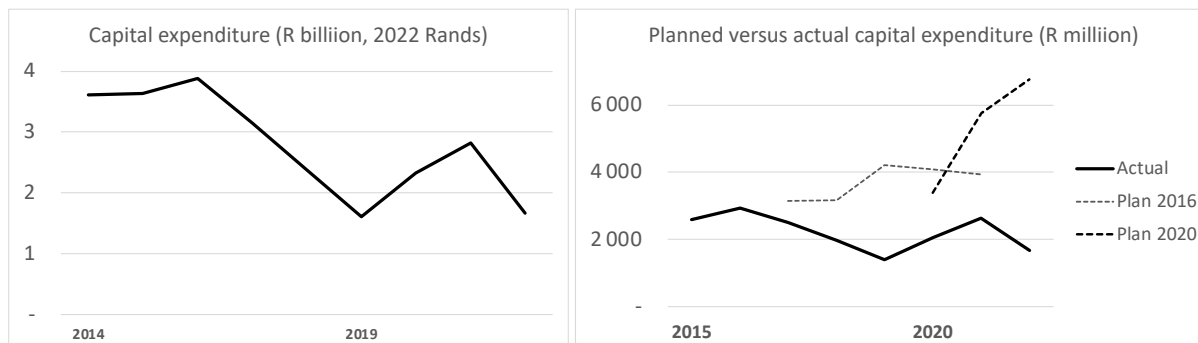
The bulk water business is very capital intensive. This means that high levels of capital investment are needed relative to revenue. **Sufficient, timely and efficient investment** in both the expansion and renewal of infrastructure are critical to the sustainability of the business.

It is expected that water boards use commercial borrowing to support their capital expenditure programmes. Six of the seven water boards have positive cash flows that can support borrowing. But actual levels of borrowing are low, as shown in the low debt to equity ratios (Table 2). It would be expected for a water board to be operating at a debt-to-equity ratio of between 0.5 and 2. However, the highest debt-equity ratio is only 0.28 and many are substantially below even that. Rand Water and Umgeni Water are at 0.14 and 0.15 respectively.

Of greater concern is that the water boards have not been investing at the required rate. Two examples are provided below.

Capital expenditure by Rand Water has declined significantly over the six-year period 2016 to 2022. In 2021/22 capital expenditure was less than half of what it was in 2016, in real terms (2022 Rands), and has consistently been below the level of planned investment. In 2021/2, actual expenditure was just 25% of the planned investment (as set out in the 2020 Investment Plan) and 78% of the budgeted investment for the year. See Figure 2.

Figure 2: Rand Water actual and planned capital expenditure

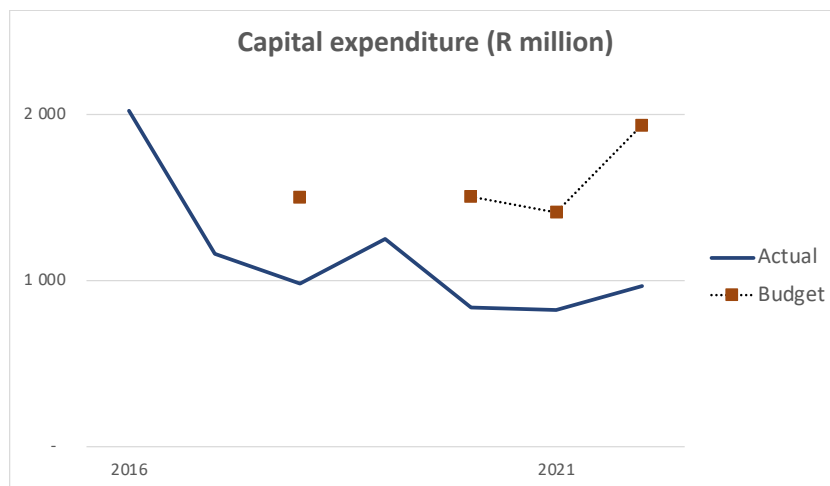


Source: Rand Water Annual Financial Statements

Rand Water has a strong cash flow and balance sheet and so finances are not the main constraint to achieving higher levels of investment.

Similarly, in the case of Umgeni Water, capital expenditure in 2021/2 was less than half in nominal terms compared to six years ago (2015/16) and has also consistently been at only a fraction of the budgeted expenditure – only 50% in 2021/2 (Figure 3). Umgeni’s finances are also strong and are not the reason for the low capital investment.

Figure 3: Actual versus budgeted capital expenditure (Umgeni Water)



Source: Umgeni Water Annual Financial Statements

2.4 Efficiency of water boards and why this matters

Water boards are required to generate cash from operations to support investments in infrastructure and most water boards have consistently done so. In 2021/2 Rand Water generated a cash flow of R2.7 billion but invested only R1.7 billion in infrastructure. And Umgeni Water generated R1.9 billion in cash from operations but invested only R0.97 billion in infrastructure.

Even in the case of the financially weaker water boards, a cash flow of several hundred million Rand was generated from operations in 2021/2: Mhlathuze R364 million, Bloem Water close to R300 million and Magalies over R200 million.

In the context of these strong positive cash flows, and with weak external regulation and oversight, there is little incentive for water boards to be economical and efficient.

For example, the personnel costs of water boards have grown significantly over time in real terms and are now very high (Table 3).

Table 3: Employees and total employment costs (2021/2)

	Rand	Umgeni	Mhlthuze	Bloem	Magalies	Lepelle	Amatola
Employees (number)	3 437	1 374	215	417	305	452	333
Employee costs (R million)	3 017	1 073	134	286	258	252	201
Cost per employee (Rands)	877 800	780 932	623 256	685 851	845 902	557 522	602 102

Source: Water Board Annual Financial Statements (2021/2)

In 2021/2 employee costs in each water board ranged between R560 000 and R880 000 per employee per year, on average. In the case of Rand Water and Amatola, per employee employment costs have grown by more than 50% in real terms (net of inflation), or by 2.75 times in nominal terms between 2010 and 2022. A similar pattern is likely in the other water boards. This is the result of consistent above inflation wage adjustments.

In the case of Rand Water, the number of employees grew by 14% from 3029 to 3437 over the same period, an increase of over 400 employees.

Rand Water spent R1.5 billion on ‘other expenses’ after subtracting all direct costs (raw water purchases, electricity, chemicals), employment costs and depreciation (in 2021/2).

Water Board cash flows are very sensitive to tariff adjustment. In the case of Rand Water, a 1% increase in the tariff is worth R177 million.

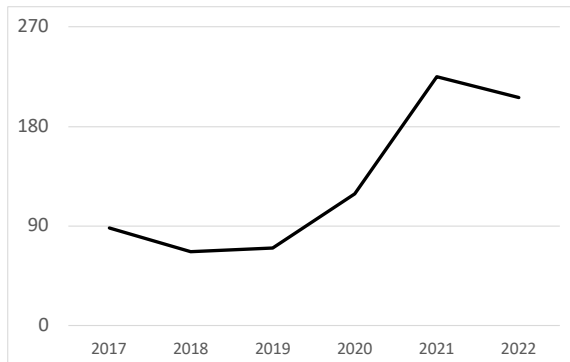
There are other examples of inefficiency, even in the case of water boards who are financially weak. For example, the cost of the executive management team at Amatola Water increased from R4.0 million to R7.1 million in one year (2020/1 to 2021/2), an increase of 78%.

2.5 Debt status of water boards (Customer debt)

Four water boards – Bloem, Magalies, Lepelle and Amatola – have high customer debts as a proportion of annual revenue (Table 2).

High outstanding customer debt has been a serious issue over a number of years in Lepelle. In some cases, for example, in Amatola Water, the situation has deteriorated significantly over the last few years (Figure 4).

Figure 4: Customer debt owed to Amatola Water (expressed as debtor days)



Source: Amatola Annual Financial Statement

High and increasing customer debt undermines the financial viability of the water boards. However, the solution to this does not lie in reducing tariffs for paying customers, but addressing the issue of non-payment by those customers (municipalities) owing money.

2.6 Debt status of water boards (Debt to Water Trading Entity)

As a direct result of the significant and unsustainable levels of customer debt to water boards outlined in 2.5 above, the water boards are collectively indebted to the Water Trading Entity in the amount of **R 8 409 billion** as at August 2022.

3 Cost drivers

A water regulator has a challenging task. He/she must balance the following: Allow for sufficient cash from operations to support the required capital expenditure programme, but at the same time create incentives to ensure operating costs are efficient (enough to meet required, efficient operating and maintenance costs, but not too much so as to allow for inefficiencies).

As shown above, the most important cost driver is the capital programme, which must be supported from the free cash flow from operations (to support direct investments and the repayment of loans).

The free cash flow from operations is determined by:

- Actual **cash receipts** from customer payments (billed revenue less amounts billed not collected)
- Less direct costs (**raw water purchases, electricity and chemicals**)
- Less **labour** costs (including management)
- Less other operating and maintenances costs (eg. equipment repairs)
- Less general expenditure and administrative overheads

The **major cost drivers** are identified in bold above, namely the effectiveness of collecting money owed (billed revenue), raw water purchases, electricity, chemicals and labour.

The main cost drivers for Rand Water are shown below (Table 4).

The analysis shows that the most significant cost drivers for Rand Water are **energy, staff and raw water purchases**. Unit raw water costs are not in Rand Water’s control and increases in energy costs can only be mitigated through improvements in energy efficiency or procuring energy from lower cost alternative sources.

Table 4: Rand Water cost drivers: 2021/2 actual versus the proposed/forecast for 2023/4

	Actual expenditure	Additional expenditure	Growth in expense	Distribution of additional expense
	2021/2	2023/24	% pa	%
Energy costs	3 251	1 334	19%	51%
Staff costs	2 253	697	14%	26%
Raw water costs	6 538	480	4%	18%
Sub-total	12 042	2 510	9.9%	95%
Other costs	2 990	121	2.5%	5%
Total costs	14 432	2 631	8.7%	100%

Source: Annexure 1.

However, staff costs are in the direct control of Rand Water and the high increase in staff costs is a significant concern (14% per annum increase, over two years from 2021/2 to that forecast in 2023/4). (Details of the cost driver analysis are provided in Annexure 2. See also section 4.)

The main cost drivers for Umgeni Water’s primary activities are shown in Table 5 below

Table 5: Umgeni Water cost drivers: 2021/2 actual versus the proposed/forecast for 2023/4

	Actual expenditure	Additional expenditure	Growth in expense
	2021/2	2023/24	% pa
External			
Energy	341	184	24%
Chemicals	130	28	10%
Raw water	421	-74	-9%
Sub-total	892	138	7.5%
Internal			
Other costs	1003	475	21%
Total staff costs	948	207	10%

Maintenance	299	179	26%
Depreciation	434	114	12%
Impairment	372	19	3%
Sub-total	3 056	994	15%
Total	4 007	1148	13%

Source: Annexure 2.

Of the five major cost drivers, only energy is outside the direct cost control of Umgeni Water. The proposed internal costs increase of R994 million from 2021/2 to 2023/4 at 15% per annum is substantially above inflation and is hard to justify. (Details of the cost driver analysis are provided in Annexure 2. See also section 4.) In addition, Umgeni are also proposing an expenditure on their secondary business of R515 million in 2023/4 compared to just R34 million in 2021/2, an increase of 300% per annum over two years.

4 Proposed tariff increases

4.1 Proposed water board tariff increases

The propose tariff increases are summarized in Table 6.

The following concerns are noted:

- The higher than inflation increases proposed by both Rand Water (9.8% increase in average effective tariff) and Umgeni Water (6.4% increase in average effective bulk water tariff).
- The very large forecast revenue increase for Lepelle Northern Water (40%) and large proposed tariff increase of 22%.
- The large revenue increase that was forecast for Amatola for 2022/3 (63%) and the large increases in the effective tariff for 2022/3 of 48%. This creates an artificial base for the 2023/4.
- The inability to assess accurately the impacts of the amalgamation of operations from Sedibeng into Magalies and Bloem Water.

Table 6: Proposed tariff increases

	Revenue (R million)			Sales volume (million kl pa)			Average effective tariff		
	2021/2	2022/3	2023/4	2021/2	2022/3	2023/4	2021/2	2022/3	2023/4
Rand Water	17,469	18,399	20,527	1,677	1,628	1,654	10.42	11.30	12.41
Umgeni	4,581	4,781	5,158	562	570	578	8.15	8.38	8.92
Lepelle Water	614	719	1,009	77	90	104	7.95	7.97	9.74
Mhlathuze	643	703	736	183	185	190	3.52	3.80	3.88
Amatola	357	583	566	38	42	43	9.36	13.81	13.28
Overberg	60	73	78	3	4	4	21.85	18.94	19.75
Bloem Water	2,077	2,329	2,390	194	200	197	10.68	11.65	12.11
Magalies	779	914	1,289	106	115	121	7.33	7.95	10.69

	Revenue increase		Sales volume increase		Effective tariff increase	
Rand Water	5.3%	11.6%	-2.9%	1.6%	8.5%	9.8%
Umgeni	4.4%	7.9%	1.5%	1.4%	2.8%	6.4%
Lepelle Water	17.1%	40.3%	16.8%	14.7%	0.3%	22.3%
Mhlathuze	9.3%	4.8%	1.4%	2.5%	7.8%	2.2%
Amatola	63.1%	-2.8%	10.5%	1.0%	47.6%	-3.8%
Overberg	22.0%	7.0%	40.7%	2.6%	-13.3%	4.3%
Bloem Water	12.1%	2.6%	2.9%	-1.3%	9.0%	4.0%
Magalies	17.3%	41.0%	8.1%	5.0%	8.5%	34.4%

Notes:

- Data is from DWS submissions (except for Umgeni Water), and has not been verified. May include secondary activities.
- Data for Umgeni Water is from Annual Financial statements and reflects bulk water revenue only. (A large increase in expenditure on secondary activities has also been proposed.)
- Highlighted cells indicate a concern with the proposed revenues and effective tariff increases.

4.2 Recommendations (water board tariff levels)

1. The **Rand Water** tariff proposal needs to be revised taking into account the cost-driver analysis shown in Annexure 1, paying particular attention to staff costs, and ensuring accurate forecast of energy and raw water costs. The proposed very large increase in staff costs (14% per annum, based on the 2021/2 actual costs) is hard to

justify. The tariff increase is also hard to justify in the absence of a credible and effective capital expenditure programme.

2. The **Umgeni Water** tariff proposal needs to be revised taking into account the cost-driver analysis and notes in Annexure 2. The proposed tariff increase is hard to justify, especially in the absence of a credible and effective capital expenditure programme.
3. The **Lepelle Water** tariff proposal needs to be revised. A 22% increase in the tariff is not justified. In this regard the decision by the Department to reduce the **Lepelle Water** Tariffs to 15% and below for various small schemes is supported.
4. The **Amatola Water** tariff proposal needs to be reassessed. The base data for 2022/23 is unlikely to be correct and hence it is likely that the proposed tariff increase for 2023/4 needs to be revised.
5. A more detailed analysis needs to be undertaken of the **Bloem Water and Magalies** proposals if better data is available on the impact of the amalgamation of the Sedibeng operations on their finances. On the basis of available data their tariff proposals appear reasonable and are supported.
6. Tariff proposals for **Mhlathuze Water** and **Overberg Water** are considered reasonable and supported.

5 Recommendations (water board tariff setting process)

1. **The Tariff consultation process.** This process is problematic for a range of reasons and although they are driven by legislated timelines, practical and logical steps need to be taken to try and improve the effectiveness and usefulness of these consultations and the outcomes for customers, Water Boards and other stakeholders. (E.g. ensuring strict adherence to the legislated timelines, developing approaches and initiatives to improve customer attendance and participation at consultation meetings and establishing feedback loops).
2. **The Water Board tariff proposals.** The proposals submitted do not, in all instances, clearly indicate to what extent and how the comments and or submissions of customers and other stakeholders have or have not been taken into account in the proposed tariff increases. This should be made a pre-requisite of the process.
3. **Common economic and cost forecast assumptions from a single credible source.** There is little consistence between water boards in the assumptions used to justify cost increases. A single CPI forecast, from a credible source (for example, the Bureau of Economic Research) should be used by all water boards. Similarly, more

transparency is needed, and the same assumptions should be used with respect to energy and chemical cost increases across all water boards.

4. **Staff cost increases need to be clearly justified**, making a distinction between a growth in staff numbers and wage adjustments. All water boards should use the same assumptions with respect to wage adjustments. Increasing in the staff complement needs a strong justification.
5. **Separate accounting for primary and secondary activities**. The Water Services Act requires that secondary activities need to be separately accounted for. Primary activities need to be restricted to the sale of bulk water to municipalities, mines and industries (and treatment of wastewater). Income and costs associated with all other activities need to be accounted-for separately. This includes any Ministerial directives.
6. **Improved financial reporting**. Reporting on the financial, institutional and technical performance of water boards needs to be improved, as follows:
 - a. Inclusion of a **standardized summary data set** for all water board annual reports with a five-year history (financial indicators, technical indicators, institutional performance indicators). The Commission is willing to propose what should be included in this set of data.
 - b. Separate section on secondary activities.
 - c. Separate financial reporting on primary and secondary activities
7. **Alignment of AFS, business plan and tariff proposals – a single financial model**. The proposed tariff increases are typically not aligned with the water boards own business plan, and there are inconsistencies in the data between what is reported in the annual financial statement, the business plan and the tariff proposals. There needs to be an alignment of the data across these three. All three need to be integrated into a **single financial model** (per water board) that is aligned with what is reported in the annual financial statements for the historical and base year data. This model needs to be made available to the Department in its tariff assessment process.
8. **Improved methodology for determining and assessing tariff increases**. The process can and should be improved in the following ways:
 - a. **Use of standard template**. A standard template to assess the main cost drivers of tariff increases needs to be developed and used. See Annexure 1 for a possible example.
 - b. The **base year** to assess cost increases should be what is reported in the audited financial statements. Use of the current year as a base year for assessment introduces uncertainties and errors in the process, because the current financial year is itself a forecast.

- c. **Multi-year tariff determination.** More certainty and rigour can be introduced into the process by introducing a multi-year tariff determination process. It is proposed to use a three-year period.
 - d. **Cost-pass throughs.** Water boards do not have control over electricity tariffs, raw water purchase costs and the cost of chemicals. Changes to prices related to these three inputs should be allowed as annual adjustments to the tariff, as part of the multi-year tariff determination process.
 - e. **Introducing a “CPI – x” pricing methodology.** There is almost no doubt that there is considerable scope to improve institutional efficiencies in the water boards. Prices should be set with a view to achieving below inflation increases (excluding external input costs outside of the control of the water boards) through efficiency improvements.
 - f. **A two-part tariff?** The challenge with a single tariff is that the strong cash flows required to support an investment programme dilute incentives to improve operational efficiencies. The possibility of introducing a two-part tariff should be investigated, separating out both the costs and revenue associate with the operating costs, versus the capital programme.
- 9. Clarifying the respective roles of the regulator and shareholder.** The Minister of Water and Sanitation is both the regulator of the water sector as well as the shareholder of the water boards. These dual roles carry the risk of a conflict of interest. As regulator, a primary duty of the Minister is to protect customers (ensuring good value for money from reliable efficient services). As shareholder, the Minister has a duty to protect the financial health of the water boards. Ideally, these two roles should be separated. At a minimum, the two roles should be clearly defined and separated from each other.
- 10. Legal basis for approval of tariffs.** A recent constitutional court judgement has created uncertainty with respect to the legal basis for approving water board tariffs. Clarity on this is needed, including a possible amendment to legislation.
- 11. Increasing capacity to regulate.** Rand Water is a multi-billion Rand business with highly paid executives and a staff of over 3 000 people. There is a significant imbalance between Rand Water’s institutional capabilities and the capacity of the regulator to monitor, assess and regulate Rand Water’s tariffs and institutional efficiency. The professional capacity and capabilities of the water economic regulator need to be strengthened significantly for it to be able to fulfil an effective regulatory function.
- 12. Customer debt.** . Rising customer debt is a real and substantial key risk to the financial viability of water boards and the water sector. The current levels of debt are unsustainable, particularly in water boards that have a significant rural mix in their customer base. Failure to address this critical issue will undoubtedly result in further

deterioration of these institution's and therefore service delivery. The fundamental risk lies in the state of municipal water services provision, revenue collection and payment levels for bulk water supply by municipalities across the country. The Minister and Department should give urgent attention to the development of focused and effective mechanisms to turnaround the technical and financial performance of municipal water services provision. The Department in collaboration with other key stakeholders, (CoGTA, National Treasury, SALGA), should develop a focused set of interventions to ensure that historic and current debt levels of Municipalities are addressed on an ongoing basis as a matter of urgency.

13. Improving institutional efficiencies of water boards. Water boards have been operating in a context of weak governance and weak oversight and regulation for years. It is very likely that water boards are highly inefficient in this context, together with the in-built weak financial incentives for efficiency improvements. A benchmarking study is needed to better understand institutional efficiencies and mechanisms to strengthen efficiency incentives need to be investigated and introduced. The potential value of institutional efficiency gains is significant: A 1% reduction in costs in the case of Rand Water represents a cost saving of R170 million a year.

The Commission looks forward to the opportunity to engage with the Minister as soon as possible.



Daveshini Padayachee

Chairperson, Water Regulatory Commission
for the Water Regulatory Commission

Date: 27 /03 / 2023

Annexure 1: Cost driver analysis for Rand Water

Cost driver analysis for

Rand Water

in million Rands

Based on data proposed by Rand Water in the tariff application

FY ending June ...	2022 actual	2024 forecast	24 cf 22 % pa	24 cf 22 R million	distribution
Raw water purchase costs	6 538	7 018	4%	480	18%
Energy costs	3 251	4 585	19%	1 334	51%
Chemicals	383	577	23%	194	7%
External costs	10 172	12 180	9.4%		
Staff	2 253	2 950	14%	697	26%
Other operating costs	1 544	1 333	-7%	(211)	-8%
Depreciation	462	600	14%	138	5%
Internal costs	4 260	4 883	7.1%		
Total costs	14 432	17 063	8.7%	2 631	100%
Revenue	17 469	20 527	8%	3 058	
Sales (million kl pa)	1 677	1 654	-1%		
	12 042	14 553	9.9%	2 510	
Average effective tariff (R/kl)	10.42	12.41	9%		
Operating cost incl dep (R/kl)	8.61	10.32	9%		
Operating cost excl dep (R/kl)	8.33	9.95	9%		
Operating surplus	2 575	2 863	5%		
Surplus as % revenue	15%	14%			
Planned capex	6 764	5 633			
Budget capex	2 134				
Actual capex	1 668				

Notes:

1. 2021/2 is used as the base, as this data can be reconciled with the 2021/2 financial statements. The use of 2022/3 would result in an estimate for 2023/4 being derived from an estimate in 2022/3.
2. The staff cost for 2021/2 does not reconcile with total cost of employees in financial statement of R3 017 million.
3. Actual capex in 2021/2 was much less than the budget of R2 124 million and substantially less than planned capex of R6.7 billion.

Annexure 2: Cost driver analysis for Umgeni Water

Cost driver analysis for Umgeni Water (primary costs only):

External	2020	2021	2022	2023		2024	24 cf 22	% pa
	actual (AFS)	actual (AFS)	actual (AFS)	budget	forecast	forecast		
energy	319	332	341	457	453	525	184	24%
chemicals	80	91	130	123	145	158	28	10%
raw water	269	299	421	306	309	347	-74	-9%
	668	722	892	886	907	1,030	138	7.5%
unit cost (R/kl)	1.31	1.32	1.59	1.54	1.59	1.78	0.19	6.0%
Internal costs								
other costs	888	1,059	1,003	1,433	1,346	1,478	475	21%
total staff costs	670	788	948	907	987	1,155	207	10%
maintenance	231	320	299	330	437	478	179	26%
depreciation	360	363	434	494	440	548	114	12%
impairment	200	199	372	245	220	391	19	3%
	2,349	2,729	3,056	3,409	3,430	4,050	994	15%
unit cost (R/kl)	4.61	4.98	5.43	5.92	6.01	7.00	1.57	14%

Notes:

- Data is from Umgeni Water tariff submission to DWS. This analysis is for primary costs only.
- 2021/2 is used as the base, as this data can be reconciled with the 2021/2 financial statements. The use of 2022/3 would result in an estimate for 2023/4 being derived from an estimate in 2022/3.
- The staff costs do not include staff costs included in the maintenance cost.
- The proposed increase in energy at 24% per annum (between 2021/2 actual and 2023/4 proposed) seems too much, and needs to be checked. (Actual increases in energy costs in the previous 2 years were only 4% and 3% respectively)
- There is a large increase in “other costs” of R475 million (between 2021/2 actual and 2023/4 proposed), or 21% per year. There is no justification given for these increases in costs. (These are primary activity costs, not secondary activities.)
- There is a large increase in staff costs of R207 million (between 2021/2 actual and 2023/4 proposed), or 10% per year. This is not adequately justified. (These are primary activity costs, not secondary activities.)

A very large increase in revenue and expenses for secondary activities is proposed (an additional R600 million in non-bulk water revenue between 2021/2 actual and 2023/4). This is not substantiated in the tariff proposal.

Notes on Umgeni Water tariff submission

Umgeni Water justify the higher than planned tariff increased on the operating environment, and specifically (1) capital programme and (2) credit risk. Neither of these arguments are cogent.

The problem with the capital programme argument is addressed in the main report. (Umgeni consistently underperformance their capital budget by a very large margin). The credit risk (municipalities not paying) is not a cost driver of the increase in tariff. The allocation for impairment is only 3% higher in 2023/4 compared to actual impairment in 2021/2. This this item is not driving up costs and hence the tariff. See Table above.

The sales growth figure quoted in the tariff submission report (2.8% growth) does not match the growth used in the forecast model (1.4% growth) for 2023/4 versus 2022/3 forecast).

R490 million from the capital budget (5 year programme) is allocated to Research and Development, information technology. This is a very large sum of money.

The reporting on cost drivers for 2020/1 to 2021/2 is misleading in the submission report. No comment is made on the 30% increase in administration staff costs.

In the cost component analysis of fixed costs (Section 7 of the report), no explanation and justification is given for the very large increase in “Other operating & administrative expenses” of R400 million (from 2021/2 actual to 2023/4 actual). (“credit losses” are separately itemized). No justification is given for the staff increase by over 200 people. Staff cost increase of 16% cannot be justified in current economic context.

The tariff increase proposed is 9%, and was adjusted down to 5.5% for eThekwini only. There seems little justification for a 9% increase across the board. No justification is given for the 5.5% tariff increase for eThekwini.

Recommendation

Umgeni adjust their main cost drivers, as per the cost drive analysis, and recalculate the tariff based on these adjustments. The outcome will be a lower tariff, on average that the current proposals for bulk water tariffs (5.5% for Ethekwini and 9% for others).