

COST OF WATER RESOURCES AND SERVICES IN SOUTH AFRICA

WRC Seminar: 01 September 2020
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national treasury

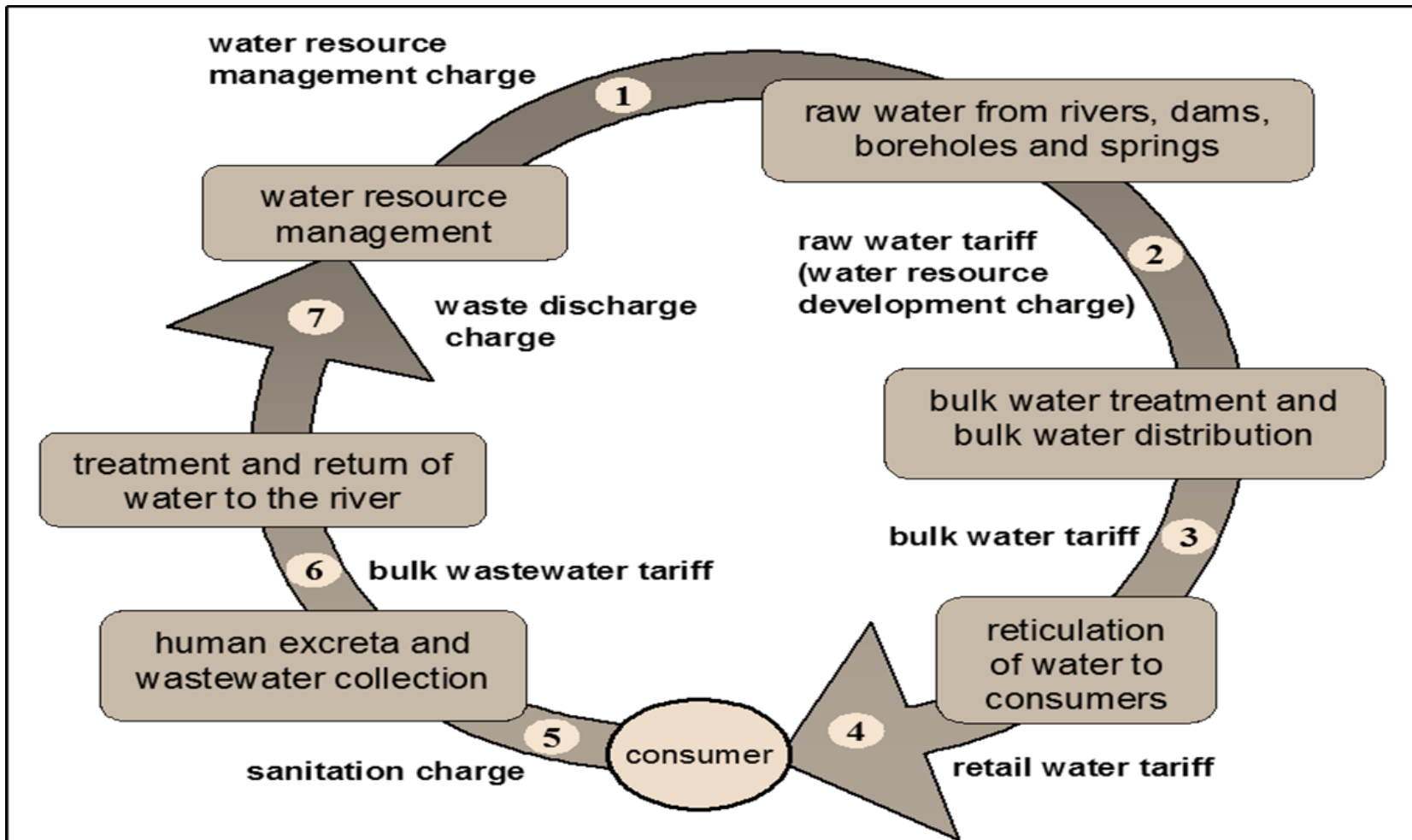
Department:
National Treasury
REPUBLIC OF SOUTH AFRICA



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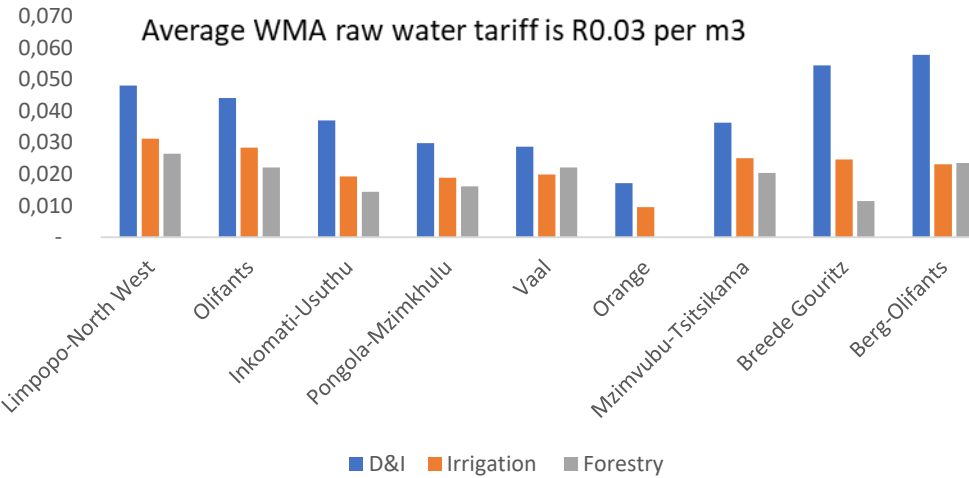
WATER SECTOR VALUE CHAIN



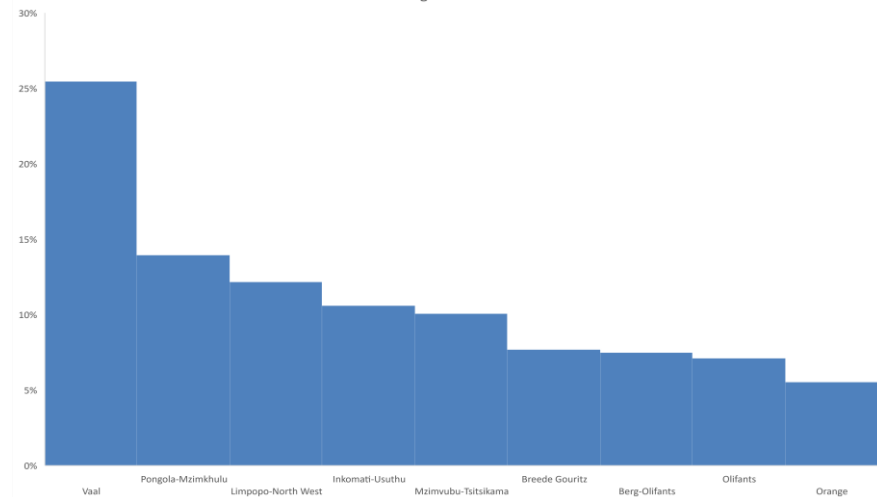
WATER RESOURCE MANAGEMENT CHARGES

2020/21 CMA charges

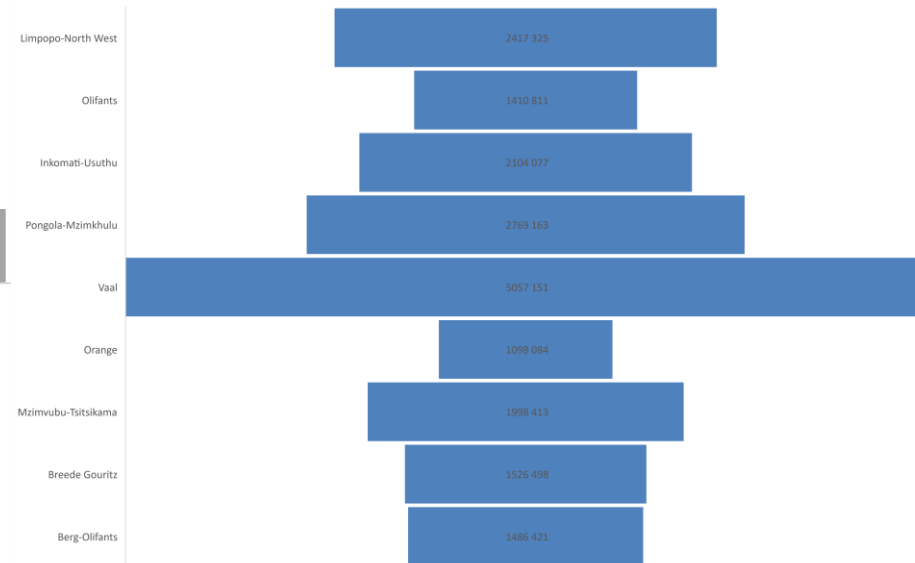
Average WMA raw water tariff is R0.03 per m3



WMA Registered Volumes



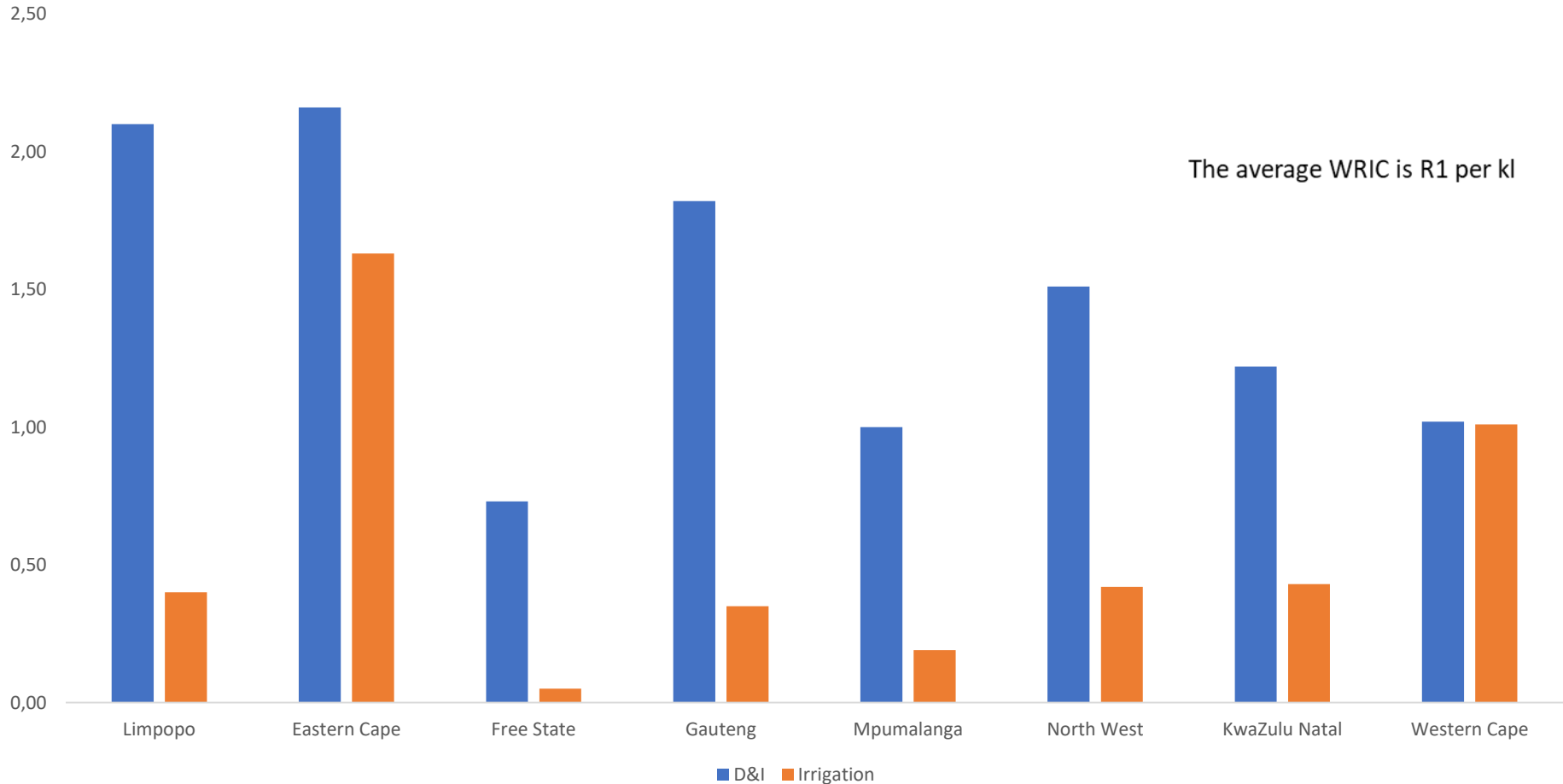
Registered Volumes



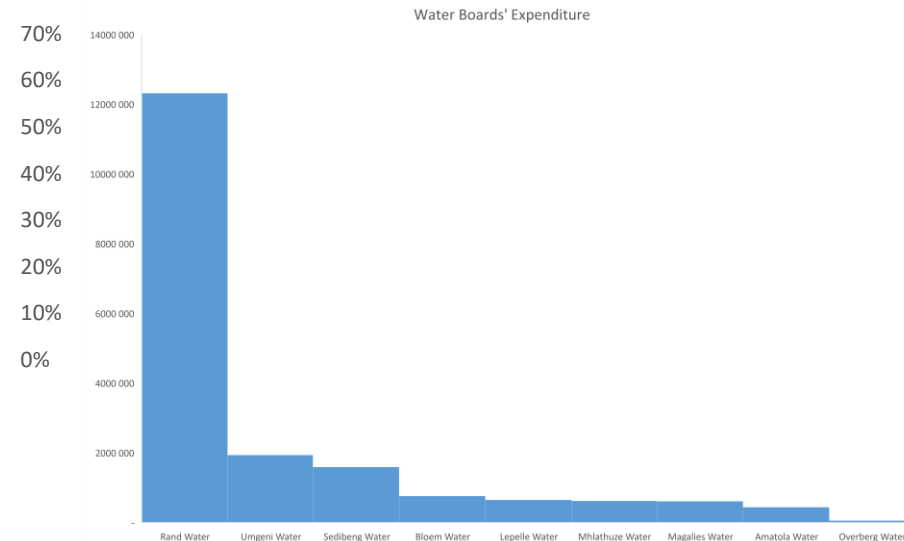
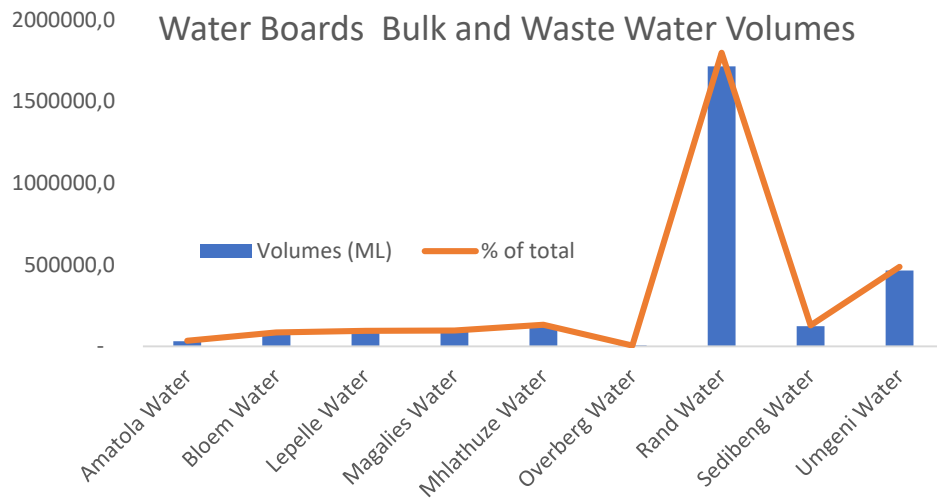
CMA	Expenditure	Tariff Revenue	Variance	Subsidy
Vaal	107 917	119 180	11 263	-
Limpopo-North West	88 716	85 170	(3 546)	3 546
Inkomati-Usuthu	132 038	50 686	(81 352)	81 352
Pongola-Mzimkhulu	94 461	59 814	(34 648)	34 648
Mzimvubu	79 063	54 490	(24 572)	24 572
Berg-Olifants	60 383	48 210	(12 173)	12 173
Olifants	67 087	44 441	(22 646)	22 646
Orange	54 784	60 836	6 052	-
Breede-Gouritz	68 099	54 882	(13 217)	13 217
Total	752 547	577 708	(174 838)	192 154

WATER RESOURCE INFRASTRUCTURE CHARGES

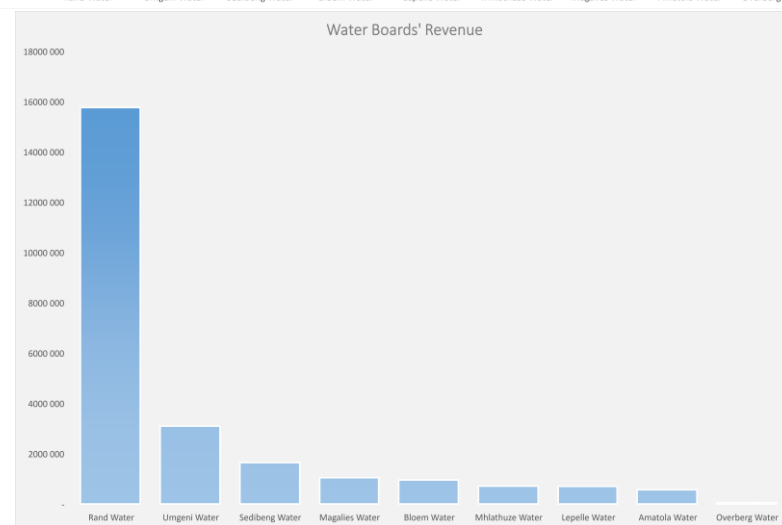
2020/21: Water Resource Infrastructure Charges



WATER BOARDS: BULK WATER SERVICES



2018/19 Water Board	Bulk Water Tariffs (R\kl)	Total Expenditure (R'000)	Total Revenue (R'000)	Variance (R'000)
Amatola Water	11	434 915	570 037	135 122
Bloem Water	8	757 552	956 824	199 272
Lepelle Water	7	648 421	704 703	56 282
Magalies Water	7	609 125	1 047 240	438 115
Mhlathuze Water	5	620 971	711 942	90 971
Overberg Water	7	50 918	56 266	5 348
Rand Water	9	12 319 895	15 768 858	3 448 963
Sedibeng Water	9	1 590 743	1 648 595	57 852
Umgeni Water	7	1 932 903	3 100 661	1 167 758
Total		18 965 443	24 565 126	5 599 683



Average bulk water tariff is R8 per kl

MUNICIPALITIES: BULK WATER SERVICES

All WSAs R'000	Operational Budget		30-Jun-20
	Main app	Adjusted Budget	Actual Revenue
National (water revenue)	53 774 502	46 328 876	40 039 771
National (sanitation revenue)	21 162 453	16 297 168	13 096 327
National water and sanitation revenue	74 936 955	62 626 044	53 136 098

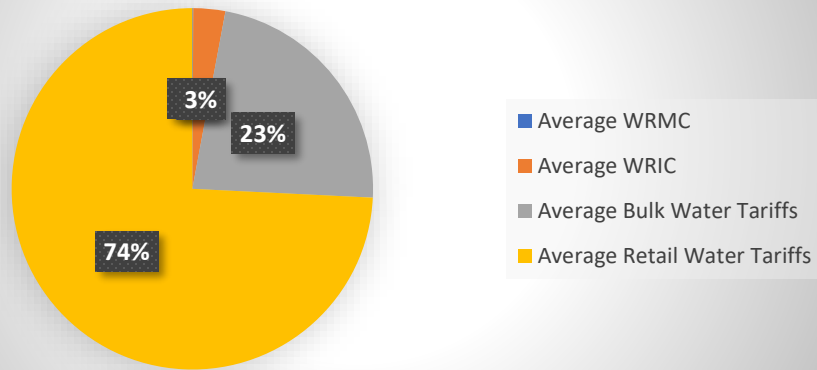
All WSA (R'000)	Operational Budget		30-Jun-20
	Main app	Adjusted Budget	Actual Expenditure
National (water expenditure)	50 871 557	51 045 587	44 158 327
National (sanitation expenditure)	17 393 726	14 181 200	9 203 331
National (water & sanitation expenditure)	68 265 282	65 226 787	53 361 658

Tshwane	Domestic Water: 2020/21		Domestic Sanitation: 2020/21		
Band	R/kl per month	Estimated Bill*ceiling (R/kl)	R/kl	Estimated Bill*ceiling (R/kl)	Total W&S
0 to 9kl	-	-	-	-	-
10 to 18kl	21	383	15	274	657
19 to 30kl	29	864	15	456	1 320
21 to 42kl	33	1 392	15	639	2 031
43 to 60kl	35	2 128	15	913	3 040
>60 kl	38	2 278	15	913	3 191

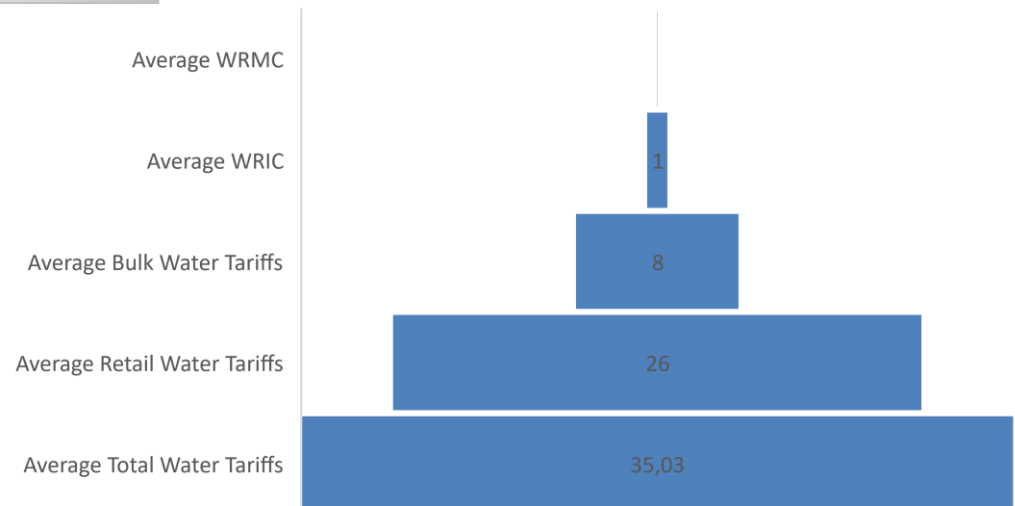
Joburg	Domestic Water: 2020/21	
Band	R/kl per month	Estimated Bill* ceiling (R/kl)
0 to 6kl	-	-
>6 to 10kl	19	190
10 to 15kl	20	297
>15 to 20kl	28	556
20 to 30kl	38	1 152
>30 to 40kl	42	1 680
>40 to 50kl	53	2 650
>50kl	57	3 407

TOTAL FINAL WATER TARIFFS

Composition of Water Tariffs

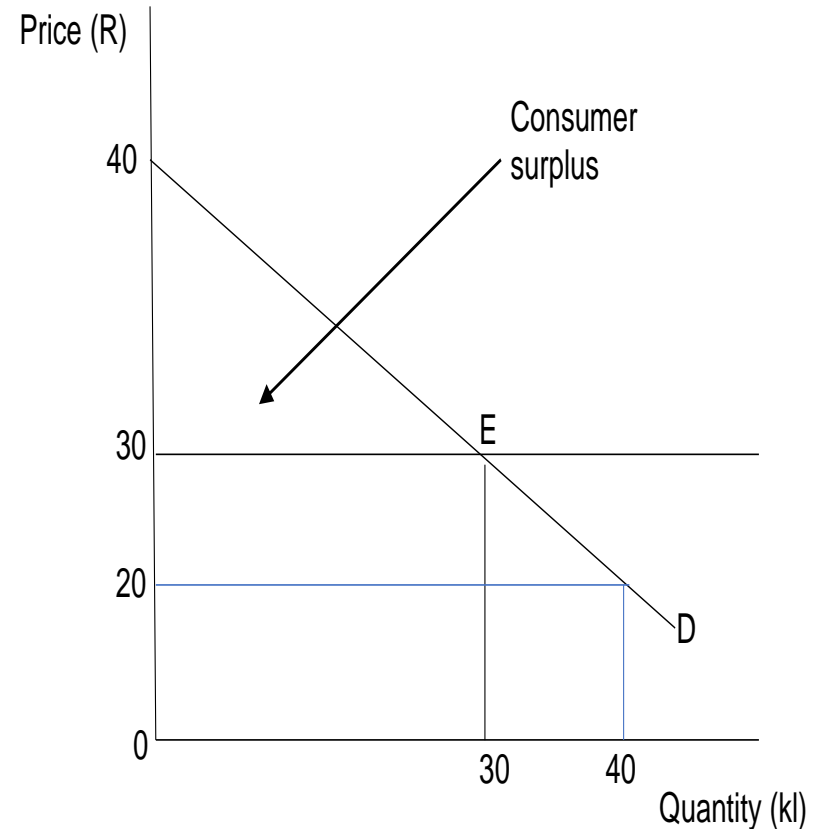


Total Average Water Tariffs



RECOMMENDATIONS

- Cost reflective tariffs and measure the correct levels of willingness to pay (Demand Curve = WTP).
- Use CoT user band C: If R40/kl is the willingness to pay, but CoT charges R30/kl.
- $CS: = (R40 - R30) * 30kl * \frac{1}{2} = R150kl$.
- Only generating R900kl. If CoT charges at R40, revenue is R1 200
- Concessions (blue line): Revenue: R800. They lower revenue and encourage high water usage.
- Pricing policies should send the correct signals.
- Economic regulatory framework should support the financial viability of utilities while protecting poor users.



ARE WATER TARIFFS COST REFLECTIVE IN RSA?

- Water tariffs at all levels are capped, concessions are given. Therefore, water boards take less than they should, so are municipalities.
- Sliding-scale tariffs show that the user-pay principle applies. The more one uses water the higher the tariff and the total cost.
- We are unable to measure accurately the willingness to pay given tariffs that are not cost-reflective. **To answer the question of affordability and cost reflectiveness; one needs to benchmark the costs of WMAs, WBs and municipalities.**
- **Studies show that at water tariffs less than 5% of household disposable income, demand is elastic and inelastic for more than 5%. The average HHs disposable income in 2019 is R34 000 (5% is R1 700) (Littlefair 1998 and Statista 2020). Upper bound food poverty line is R1 227 (Stats SA 2019).**
- High levels of water and sanitation debt across the value chain could also be a sign of unwillingness to pay (WTE:R18bn, WBs:R15bn: LG: R50bn).
- We need strong regulation and enforcement of legislation.
- NT recent study: poor tariff settings by municipalities contributes to unfunded budgets. Two steps are required to close the gap between actual tariffs and cost-reflective tariffs. The first step is for municipalities to determine every year the amount that tariffs should be in order to cover cost increases. The second step is to increase the tariffs to these cost-reflective levels.
- Improved political support for debt collection and credit control is needed.

End of Presentation