MONTHLY DASHBOARD FOR A WATER SECURE GAUTENG

1. OVERALL WATER CONSUMPTION: Metros, Emfuleni, smaller municipalities monthly metering data for April shown below

	TOTAL RW	Joburg	Ekurhuleni	Tshwane	Emfuleni	Mogale City	Midvaal	Merafong	Rand West	Lesedi
April Ave Daily Use (MLD)	4,091	1698	999	784	317	99	31	65	78	20
March Ave Daily Use (MLD)	4,109	1682	987	814	319	100	33	70	77	25
February Ave Daily Use (MLD)	4,178	1700	1032	819	312	105	39	70	80	22
WUE Target Use (MLD)	3,604	1,356	1,022	666	239	93	28	86	91	23
DIFFERENCE (MLD)	487	342	23	118	78	20	12	20	13	3
% From target use	14%	25%	-2%	18%	33%	21%	43%	-23%	-14%	-13%
Gross Per capita use (lcd)	289	279	246	245	439	311	420	337	299	201
Increase/Decrease from previous				-	-	-	-	-		-
* Decrease from last week, but above target 🔶 Increase from last week, but in target 🐥 Decrease, within target 🔶 Increase										

• Month on month, total water use decreased slightly in April, exceeding the water use efficiency (WUE) target by 14% or 487 MLD

• Monthly meter readings are used for billing and cover all municipalities whereas weekly meter readings are for major users only.

2. TREND IN MONTHLY CONSUMPTION / WATER USED – CURRENT FINANCIAL YEAR-TO-DATE (million litres per day = MLD)



3. IVRS SYSTEM STATUS: The 10-year view of combined surface water storage shows that the system is spilling for the tenth week, currently at 102.6% storage and above average for this time of year. The Vaal Dam decreased to 107.6% on Tuesday with several sluices open. Notwithstanding the healthy state of IVRS dams, the total annual allocation from DWS has been exceeded by 12.5%, at an abstraction of 1,800 Mm³ vs the WUE target of 1,600, threatening IVRS sustainability. In the coming year the target of 1,600 will again be monitored.

		Abstraction (Mm ³)	Variance (%)
2022/23	=	1,750	9.4%
2023/24	=	1,793	12.1%
2024/25 =		1,800	12.5%



WATER LEAKS, OUTAGES AND RESERVOIR LEVELS

4. YTD LEAKS REPORTED AND REPAIRED from July '24 to date. The metros are aligning weekly reporting of leaks- this metric will improve over time.



Each metro has a different system of logging, attending to, & closing notifications related to bursts / leaks. A back-office process is required to confirm that work has been done prior to closing works orders. Some leaks are reported repeatedly, and the admin process may take a while to update once repairs are complete. The size and complexity of the water reticulation systems also varies both between municipalities and suburbs.

5. PLANNED MAINTENANCE: Rand Water typically undertakes planned maintenance in winter months when demand is lower, to minimize disruptions and reduce water outages due to limited supply. The maintenance program for 2025 runs from the end of May to July. During this period, pumping capacity will be reduced at the Eikenhof, Palmiet, Mapleton, and Zwartkopjes systems. Areas within the cities of Johannesburg, Ekurhuleni, and Tshwane may experience low pressure or intermittent water supply. Such outages typically result in prolonged recovery periods and all users are advised to use water sparingly to ensure equitable distribution. Reduced demand helps reservoirs to fill more quickly so that everyone has access to sufficient water. The planned maintenance and areas affected at the end of May and early in June are shown here. Planned maintenance from end of June will be reflected in the next dashboard.

	Name	Dates	Duration	Areas affected	Activity
1	B16 New Connection	29 May - 2 June	107 hrs	Mapleton supply	To connect newly constructed pipeline, Zuikerbosch Station 5 to Mapleton booster pump station
2	Pump set 5 Amanzimtoti	29 - 30 May	13.5 hrs	Emfuleni & Midvaal	Overhauling pump set supplying VVS set
3	Russel Road meter installation	3 June	12 hrs	Southern Areas, Barlow Road	New meter installation around Primrose – water supply affected during installation

6. RESERVOIR STORAGE LEVELS: The graph indicates the percentage of water storage in the four main strategic Rand Water reservoir systems feeding into Gauteng since mid-October 2024. Palmiet comprises 59% of the total storage volume, Mapleton 23%, Eikenhof 11% and Zwartkopjes 7%. The overall target reservoir storage level (including all smaller reservoir systems too) is 60%, at which point the system has sufficient pressure to feed the entire area. Power failures and a pipe burst on the Eikenhof system has led to storage levels falling to *37.5%* nearly half of that reported a month ago, at >70%.



7. NON-REVENUE WATER (NRW) 10-year TREND: This is the volume of potable water distributed for which the municipality receives no income*. The target for municipalities in SA is <25% but the actual NRW is much higher. Ekurhuleni has made progress to achieve <30%. Latest data for Joburg is for January, Tshwane is for March, and April for Ekurhuleni.



8. TOTAL LOSSES 10-year TREND: This is the volume of water that runs to waste without any user using it as well as water stolen, or under-recorded by water meters. This includes leaks on mains, leaks and overflows on storage infrastructure and on service connections *outside private property boundaries*. The losses shown on the graph include both physical losses and commercial / apparent losses. The target for physical losses is < 15%, and shown below in dotted lines for the last few reporting periods.



9. PROGRESS ON METRO NRW REDUCTION INTERVENTIONS: Each of the metros have strategies how to reduce NRW and losses. Expected savings are for the current year (ending 30 June). Performance based contracts can reduce NRW more rapidly as savings in non-revenue water can be applied to cover the cost of such contracts. Metros are currently doing feasibility studies to quantify the long-term investment required to reduce NRW and the water loss savings that could be achieved.

Current NRW Reducing Initiatives	JHB	EKU	TSH
Leaking reservoir / tower infrastructure repair	х	х	
Repair / replacement of Zonal bulk meters	x	х	
Active/Passive leak detection	x	х	x
New pressure management zones and MNF	х	х	х
Retrofitting and removal of wasteful devices	х	х	
By-Law enforcement	х	х	
Water pipe replacement	x	х	x
Meter replacement	x	х	x
EXPECTED SAVING (MLD)	102	15	5

***NRW** = Unbilled authorised use + Water losses Where Unbilled authorised use, includes:

- Unbilled metered use (e.g. municipal own use, supply to communal taps in informal settlements) and
- Unbilled, unmetered use (e.g. fire-fighting, flushing of mains and sewers, deemed/flat-rate consumption)
 And Water losses = Apparent losses + Real losses
 Where Apparent losses include:
- Metering inaccuracies (old meters under-read actual use)
- Unauthorised consumption (illegal connections and water theft)

INFORMATION AND CONTACTS

JOBURG: For information on water outages and to report leaks: https://www.johannesburgwater.co.za/emergencies/ Or call: 0860-JOBURG Or find outage updates on X: JHB: https://x.com/JHBWater Check for underground leaks by reading your meter regularly: https://joburg.org.za/services /Pages/City%20Services/ Water%20and%20Sanitation/Water%20and%20Sanitat ion%20Links/Reading-your-own-meter.aspx Reading your utility bill and compare to water meter reading: https://joburg.org.za/services /Documents/Customer% 20Service%202020/How%20To%20Read%20Your%20M unicipal%20Bill%20Explained.pdf TSHWANE: For information on water outages and to report leaks: https://www.tshwane.gov.za/?page_id=953 Or call: 080 111 1556 Or whatsappL 087 153 1001 Or find outage updates on X: CoT: https://x.com/CityTshwane	 EKURHULENI: For information on water outages: https://www.ekurhuleni.gov.za/eku24-7-news/ On Twitter (X): @City_Ekurhuleni and @CoE_Call_Centre On Facebook: City of Ekurhuleni Report leaks at: 0860 54 3000 My COE App On Twitter (X): @CoE_Call_Centre Resources for how to use water sparingly: https://www.ekurhuleni.gov.za/eku24-7-news/ On Twitter (X): @CoE_Call_Centre Resources for how to use water sparingly: https://www.ekurhuleni.gov.za/eku24-7-news/ On Twitter (X): @City_Ekurhuleni On Facebook: City of Ekurhuleni Utility bill information https://siyakhokha.ekurhuleni.gov.za/ My CoE app https://www.ekurhuleni.gov.za/wp-content/uploads/2022/10/A3- Step-By-Step-Guide-To-Submitting-Your-Meter-Readings.pdf https://www.ekurhuleni.gov.za/press-releases/utility-services/protect- your-water-meter-you-will-pay-for-negliaent-damage-or-tamperina/ Resources for how to use water sparingly: https://waterwise.co.za/site/home.html https://ioburg.org.za/Campaigns/WaterUseEfficiency/ToolKit.aspx https://ioburg.org.za/Campaigns/Pages/Campaigns/Savewater/Savew ater.aspx https://www.tshwane.gov.za/?p=52404
Seasonal weather forecast: South Africa Weather Services publishes quarterly climate outlook report: https://www.weathersa.co.za/Documents/SeasonalFor ecast/SCOLF202410 01112024121600.pdf The prediction is for above normal rainfall in summer rainfall regions and above normal temperatures across the country. New Links to water outages & quality issues: https://watercan.org.za/nowatermap/	Links to pertinent news articles: Tunnel closure: https://www.dws.gov.za/Communications/PressReleases/2024/MS%20- %20The%20South%20African%20and%20Lesotho%20Governments%20all%2 Oset%20for%20the%20closure%20of%20the%20Lesotho%20Highlands%20W ater%20Project%20Tunnel%20tomorrow.pdf https://www.citizen.co.za/news/south-africa/lesotho-highlands-water-project-when-maintenance-completion/ Eikenhof flexibility project: https://www.engineeringnews.co.za/article/rand-water-prepares-for-more-maintenance-2024-12-11