

MONTHLY DASHBOARD FOR A WATER SECURE GAUTENG

March 2025

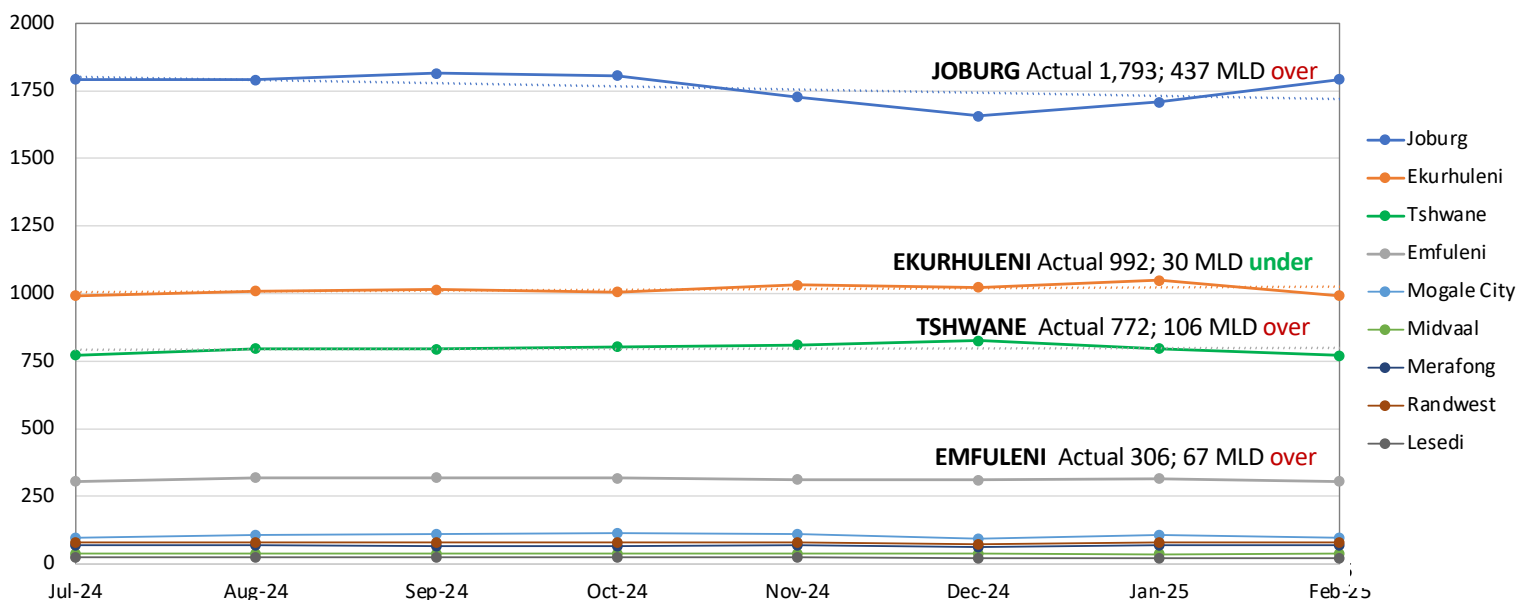
1. OVERALL WATER CONSUMPTION: Metros, Emfuleni, smaller municipalities monthly metering data for February shown below

	TOTAL RW	Joburg	Ekurhuleni	Tshwane	Emfuleni	Mogale City	Midvaal	Merafong	Rand West	Lesedi
February Ave Daily Use (MLD)	4,168	1,793	992	772	306	97	38	68	79	23
January Ave Daily Use (MLD)	4,181	1,708	1,048	796	316	106	37	69	79	22
December Ave Daily Use (MLD)	4,137	1,657	1,024	825	312	113	40	67	80	20
WUE Target Use (MLD)	3,604	1,356	1,022	666	239	93	28	86	91	23
DIFFERENCE (MLD)	564	437	30	106	67	20	12	20	12	3
% From target use	16%	32%	-3%	16%	28%	21%	43%	-23%	-13%	-13%
Gross Per capita use (lcd)	295	294	244	242	424	311	420	337	303	201
Increase/Decrease from previous	↓	↑	↓	↓	↓	↓	↑	↓	same	↑

* ↓ Decrease from last week, but above target ↑ Increase from last week, but in target ↓ Decrease, within target ↑ Increase

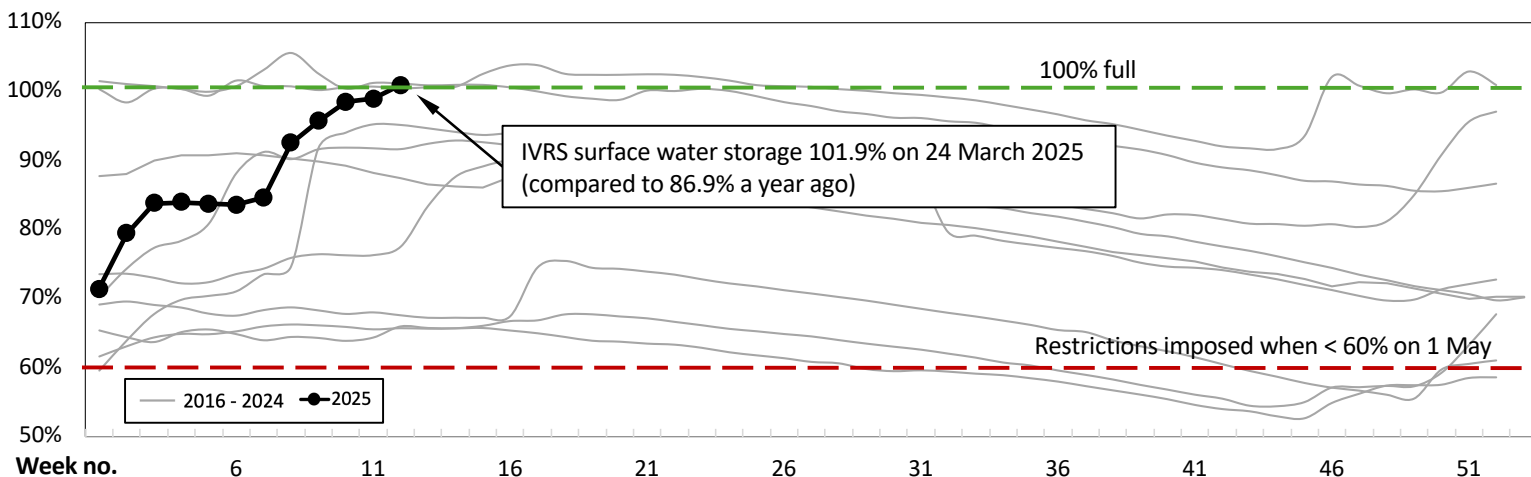
- Month on month, total water use decreased slightly in February, exceeding the water use efficiency (WUE) target by 16% or 564 MLD
- Monthly meter readings are used for billing and cover all municipalities whereas weekly meter readings are for major users only.

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



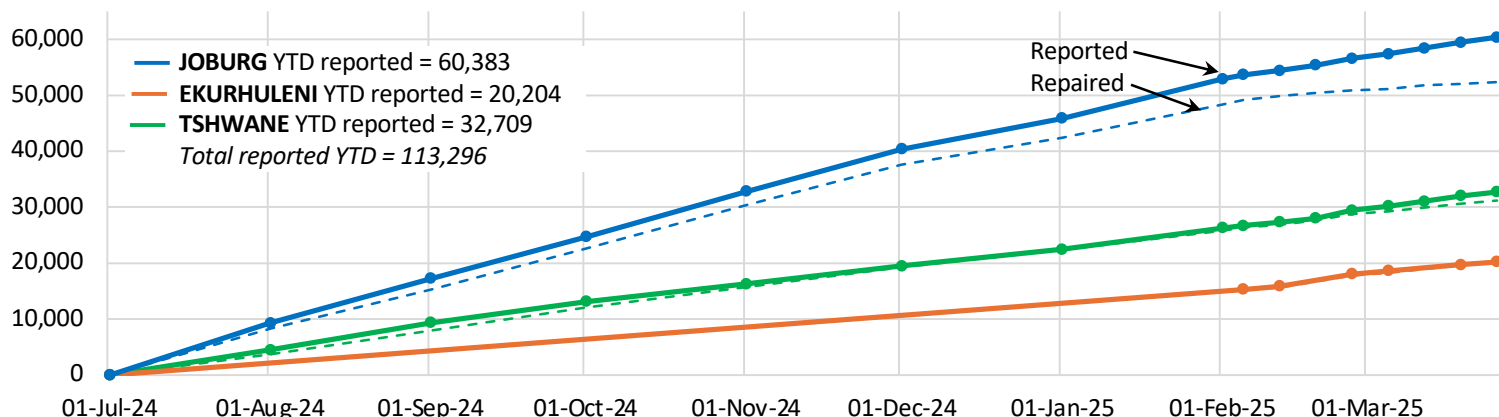
3. IVRS SYSTEM STATUS: The 10-year view of combined surface water storage shows that the system is spilling, currently at 101.9% storage and above average for this time of year. The Vaal Dam increased to 107.4% on Tuesday (up by 4.4% from last week). However, at current consumption, the annual allocation from DWS will be exceeded by **15% at abstraction of 1,823 Mm³**, threatening IVRS sustainability. The weather forecast for the next week shows further cool and wet weather. Please use water sparingly, as the system will remain vulnerable to shocks and stresses such as power failures.

DWS Annual Allocation	=	1,600 Mm ³
2022/23 Abstraction	=	1,750 Mm ³
2023/24 Abstraction	=	1,793 Mm ³
YTD Abstraction (10 mths)	=	1,519 Mm ³
2024/25 extrapolated	=	1,823 Mm ³



WATER LEAKS, OUTAGES AND RESERVOIR LEVELS

4. YTD LEAKS REPORTED AND REPAIRED from July '24 to date. Annually, reported leaks vary between about 40,000 in Tshwane and Ekurhuleni and 100,000 in Joburg, translating to ± 500 leaks reported in the Gauteng metros daily. The metros are aligning weekly reporting of leaks— this metric will improve over time.

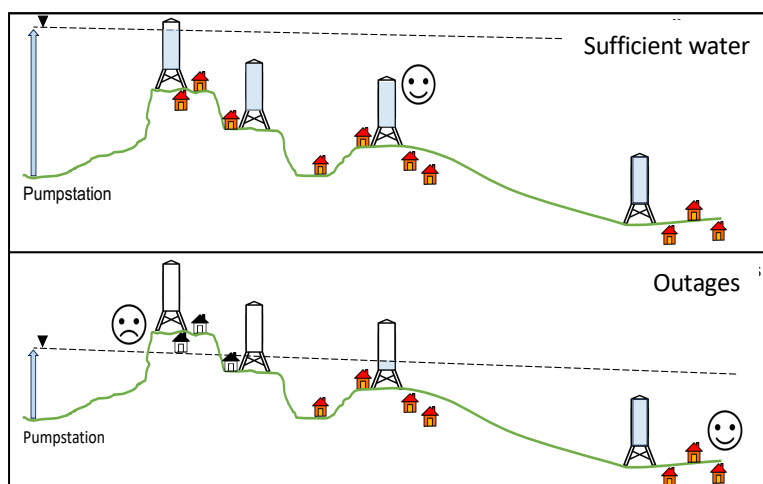


Each metro has a different system of logging, attending to, & closing notifications related to bursts / leaks. A back-office process is required to confirm that work has been done prior to closing works orders. Some leaks are reported repeatedly, and the admin process may take a while to update once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

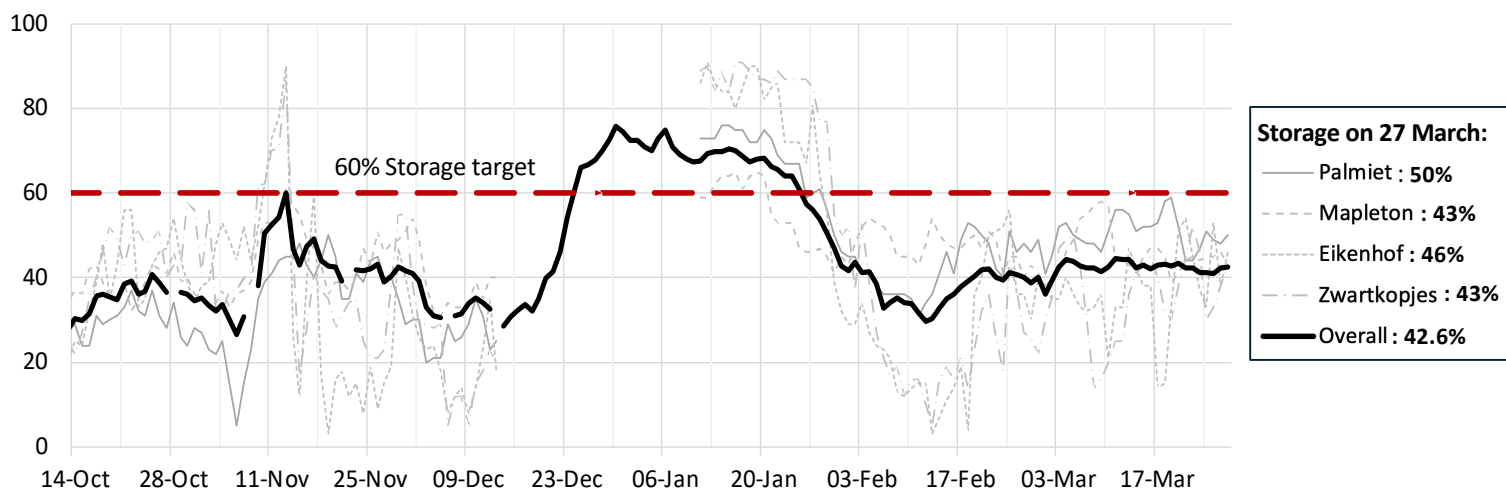
5. WATER OUTAGES: Water is distributed through a complex system of reservoirs, towers and networks. Outages are usually reported by reservoir.

When a sufficient volume of water is pumped into the system, all reservoirs can be filled, and all households have water. When there are breakdowns or excessive use, and there is too little water in the system, low pressure and intermittent supply is sometimes experienced, especially in high-lying suburbs.

Often, it is a struggle to stabilise reservoir levels as water drawn from the reservoir is more than the volume that can be supplied to the reservoir by the bulk supply. Usually, levels recover overnight when demand is lower, but responsible water use by everybody will lessen the burden on all areas.

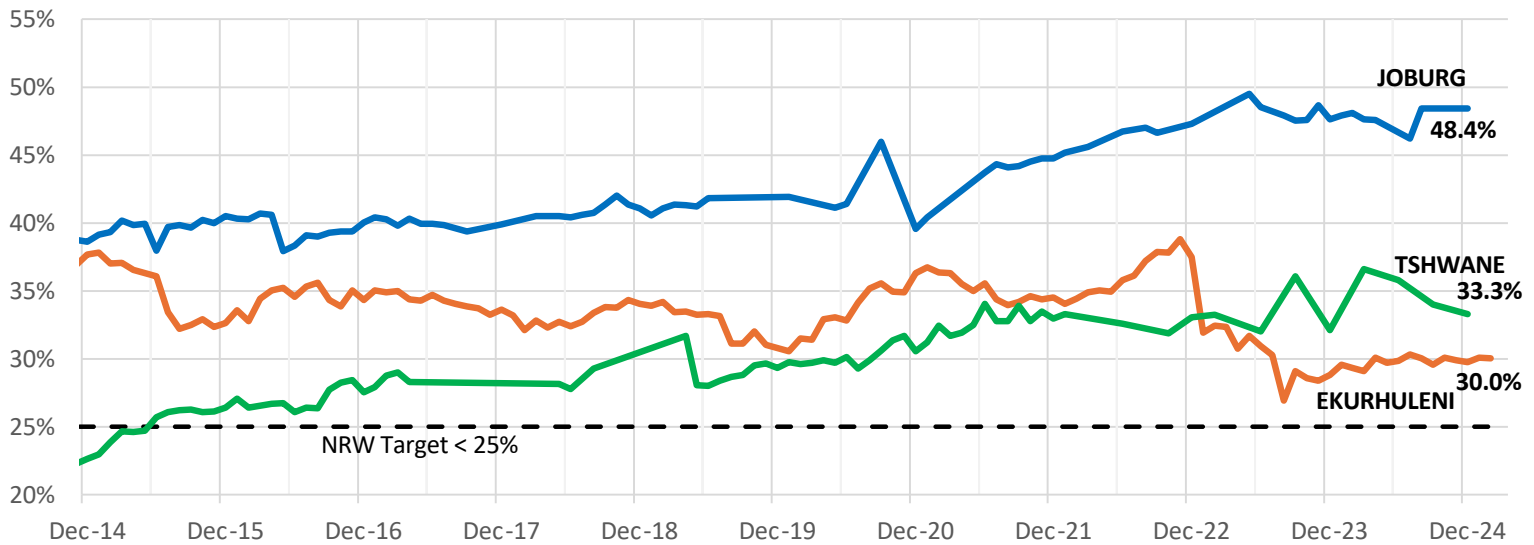


6. RESERVOIR STORAGE LEVELS: The graph indicates the percentage of water storage in the four main strategic Rand Water reservoir systems feeding into Gauteng since mid-October 2024. Palmiet comprises 59% of the total storage volume, Mapleton 23%, Eikenhof 11% and Zwartkopjes 7%. The overall target reservoir storage level (including all smaller reservoir systems too) is 60%, at which point the system has sufficient pressure to feed the entire area. When overall storage exceeds 60%, water outages are less likely. Since mid-January, overall storage has remained below 60% resulting in lower pressures and increased outages.

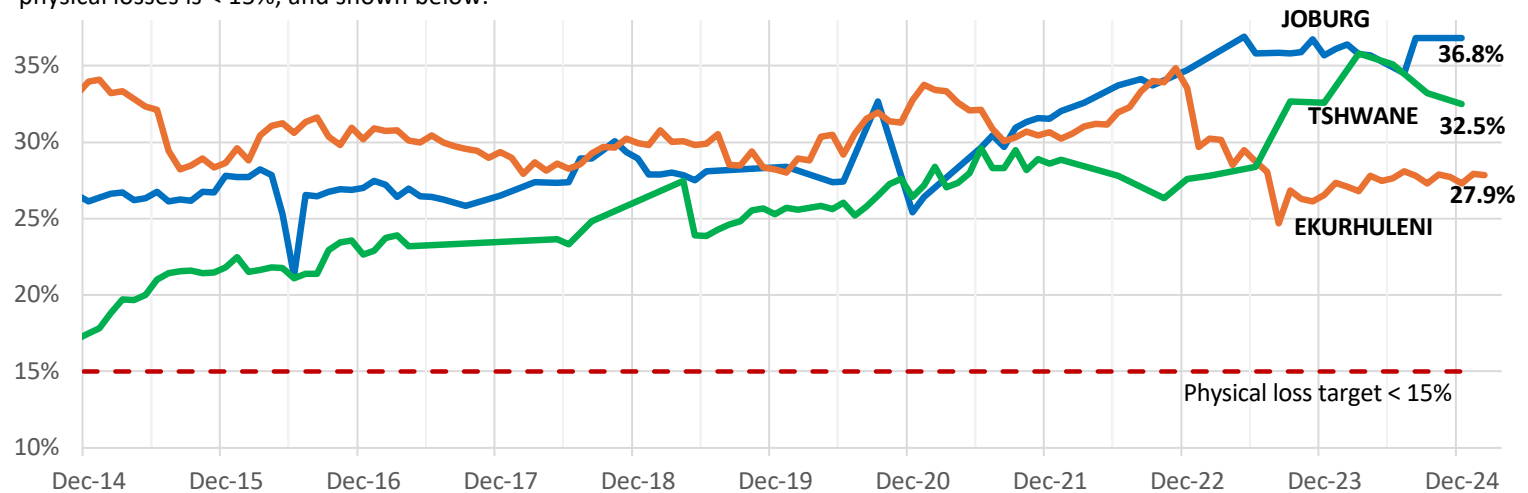


METROS WATER MANAGEMENT

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%, while Joburg has remained at 48.4%. Latest data for Joburg and Tshwane is for December, and February 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. Physical losses impact directly on the volume of water that is used while commercial losses result from water being used but not paid for. Ekurhuleni reported 27.9% total loss, of which 21.7% was physical loss and 6.1% commercial loss. The target for physical losses is < 15%, and shown below.



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	x	x	
Repair / replacement of Zonal bulk meters	x	x	
Active/Passive leak detection	x	x	x
New pressure management zones and MNF	x	x	x
Retrofitting and removal of wasteful devices	x	x	
By-Law enforcement	x	x	
Water pipe replacement	x	x	x
Meter replacement	x	x	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)

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%20Sanitation%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%20Municipal%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>

Seasonal weather forecast:

South Africa Weather Services publishes quarterly climate outlook report:

https://www.weathersa.co.za/Documents/SeasonalForecast/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/>

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): @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-neqligent-damage-or-tampering/>

Resources for how to use water sparingly:

- <https://waterwise.co.za/site/home.html>
- <https://www.dws.gov.za/campaigns/WaterUseEfficiency/ToolKit.aspx>
- <https://joburg.org.za/Campaigns/Pages/Campaigns/Savewater/Savewater.aspx>
- <https://www.tshwane.gov.za/?p=52404>

Links to pertinent news articles:

Tunnel closure:

<https://www.dws.gov.za/Communications/PressReleases/2024/MS%20-%20The%20South%20African%20and%20Lesotho%20Governments%20all%20set%20for%20the%20closure%20of%20the%20Lesotho%20Highlands%20Water%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>