





Overview

South Africa experiences significant weather variations between winter and summer owing to its diverse geography and subtropical location. The country has a combination of summer and winter rainfall zones, with the Western Cape predominantly receiving rainfall during winter, while the remainder of the country experiences summer rainfall. Temperatures also vary significantly, with the interior experiencing cold, arid winters and hot, humid summers, whereas coastal areas exhibit more temperate conditions.

SAWS reported that the El Niño-Southern Oscillation (ENSO) is currently in a neutral state and is predicted to be in a neutral state for the foreseeable future. However, ENSO is known to have limited influence in South Africa during the current season. The most recent climate report from SAWS indicates below-normal rainfall during winter and early spring in the south-western regions of the country, whereas the eastern coastal areas are anticipated to experience above-normal rainfall. The expected above-normal rainfall in early and mid-spring is unlikely to improve surface water storage in the eastern coastal region due to the forecasted above-average temperatures.

At the end of August 2025, the national dam levels were at 96.2% of FSC, reflecting a 13.8% increase compared to the same period last year, when overall storage was at 82.4% of FSC. At least 82 of the 222 national dams were above 100%, and only one dam was below 10% of FSC. The SPI drought indicator assessed at the end of July 2025 indicates that parts of the Eastern Cape and Mpumalanga provinces experienced severe drought, while moderate drought was observed in parts of Thabo Mofutsanyana DM in North West, ZF Mgcawu in the Northern Cape, City of Cape Town in Western Cape, Ehlanzeni DM in Mpumalanga, Sekhukhune and Capricorn DMs in Limpopo, and Sarah Baartman, Chris Hani, and Alfred Nzo DMs in the Eastern Cape.

The conservation and restoration of wetlands are critical for maintaining water security in the country. Wetlands serve as natural resources and infrastructure, providing various goods and services. Significant efforts are being made to implement various rehabilitation interventions for wetlands across the country, including the Isimangaliso Wetland Park in KwaZulu-Natal. The Park Authority, in collaboration with the Department of Forestry, Fisheries and the Environment (DFFE) through the Working for Wetlands Programme, has achieved significant progress in rehabilitating degraded areas and preserving the ecological integrity of the system through the formulation of rehabilitation plans and related implementation activities.

Rainfall

In winter and early spring, the areas that receive significant rainfall are limited to the southwestern parts of the country and the southern and eastern coastal areas. The weekly rainfall for August 2025 is presented in Figure 1. Notably, the second week of August 2025 experienced relatively higher rainfall across the country, with some areas in Limpopo and the Western Cape receiving over 100 mm.

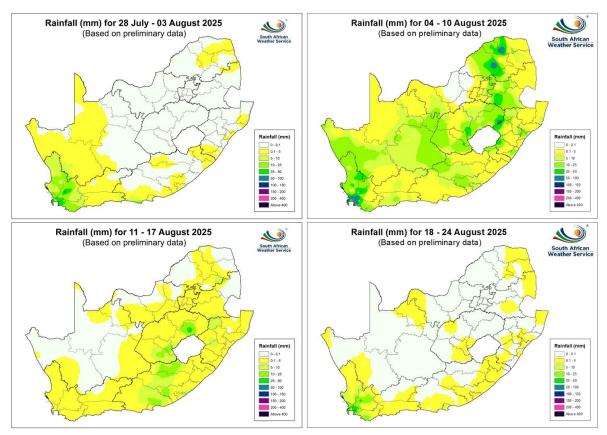


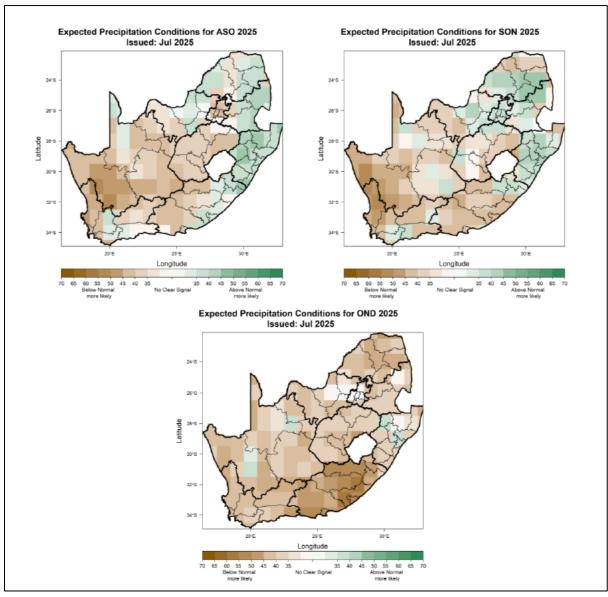
Figure 1: Weekly rainfall distribution for August 2025.

Weather Forecast and Early Warning

The weather has a significant impact on water resources. Rising temperatures increase evaporation and reduce water availability, while extreme weather events, such as droughts and floods, exacerbate water scarcity and pollution, respectively. Changes in precipitation patterns also affect water availability.

SAWS (2025) indicated that El Niño-Southern Oscillation (ENSO) is firmly in a neutral state and is predicted to be in a neutral state for the foreseeable future. ENSO, however, has limited influence on South Africa during the winter seasons.

With the start of the spring and early summer seasons, the eastern parts of the country normally start receiving significant rainfall (SAWS,2025). During early- and mid-spring the eastern and south-eastern areas of the country are expected to receive above-normal rainfall with most other areas expected to be below-normal. During the late-spring season, however, most areas of the country are expected to receive below-normal rainfall (Figure 2).



<u>Figure 2: August-September-October 2025 (ASO; left), September-October-November 2025 (SON; right), October-November-December 2025 (OND; bottom) seasonal precipitation prediction. (Source: SAWS, 2025).</u>

The latest climate report (SAWS,2025) also stated that the minimum and maximum temperatures are largely expected to be above-normal for the most parts during the spring seasons (Figure 3).

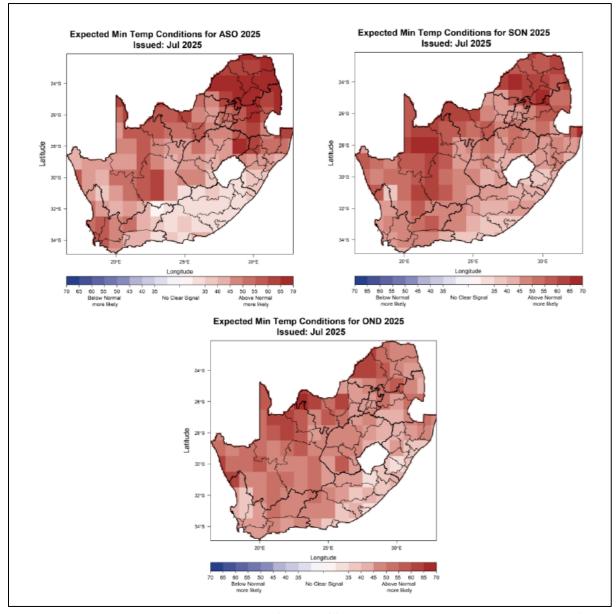


Figure 3: August-September-October 2025 (ASO; left), September-October-November 2025 (SON; right), October-November-December 2025 (OND; bottom) seasonal minimum temperature prediction. (Source: SAWS, 2025).

"The anticipated above-normal rainfall during the early- and mid-spring seasons is unlikely to benefit water reservoirs in the and eastern and south-eastern areas of the country; several settlements in these regions are still experiencing moderate drought conditions, which, coupled with the expected above-normal minimum and maximum temperatures, among other factors, can result in exacerbated water loses through evapotranspiration processes. Additionally, the minimum and maximum temperatures are expected to be mostly above normal across the country, and this is likely to result in increased demand for cooling during the forecast period." SAWS (2025)

National Dam Storage

The national surface water storage trends for the current hydrological year (2024/25) against the past four hydrological years are graphically presented in Figure 4. The graph shows that at the end of August 2025, the national dam levels were 96.2% of Full Supply Capacity (FSC). The current levels have been stable over the last three months. Moreover, this level is 13.8% higher than last year same time, when the overall storage level was at 82.4% of FSC (Table 1).

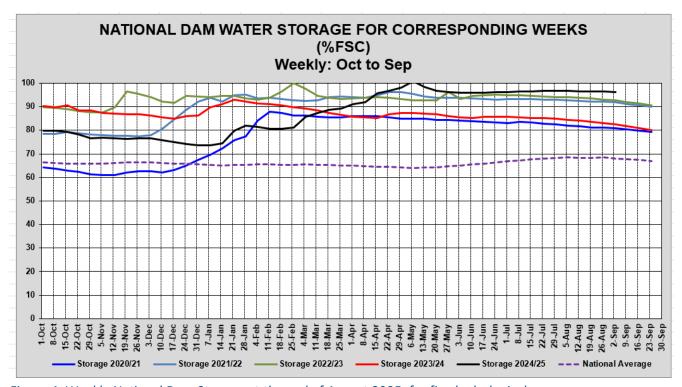


Figure 4: Weekly National Dam Storage at the end of August 2025, for five hydrological years.

Table 1 and Figure 5 show a summary of the status of 219 South African dams plus three dams from the Kingdoms of Eswatini and Lesotho. Based on 25 August 2025 dam data, the combined storage in the Western Cape province reached 84.2% of FSC, compared to the previous month when it was the only province with an overall surface water storage below 80%. Notably, at least 88 of 222 dams were above 100% of FSC, only one (<1%) dam was below 10% of FSC (critically low).

<u>Table 1: National Surface Water Storage – 26 August 2025.</u>

			Number of Dams per FSC category				% of I	ull capac	ity
	FSC						Last Year	Last Week	This Week
Provinces/ Countries		Total					28	18	26
sharing Water		Number		10 - <50	50 - <100	>=100	August	August	August
Resources with RSA	million m ³	of Dams	<10%	(% of FSC)	(% of FSC)	(% of FSC)	2024	2025	2025
Kingdom of Eswatini	333.75	1			1		89.4	95.1	93.8 ↓
Eastern Cape	1 727.70	46		5	34	7	79.9	81.6	81.2 ↓
Free State	15 656.9	21			16	5	80.6	100.8	100.4 ↓
Gauteng	128.08	5			1	4	87.9	97.9	99.5 个
KwaZulu-Natal	4 909.66	19			15	4	85.7	96.4	96.1 ↓
Kingdom of Lesotho	2 362.63	2			2		80.4	93.3	93.1 ↓
Limpopo	1 484.64	29	1	3	14	11	76.7	85.8	85.4 ↓
Mpumalanga	2 538.20	22			19	3	89.0	97.8	97.3 ↓
Northern Cape	146.33	5			3	2	75.6	97.6	91.8 ↓
North West	866.23	28			11	17	69.1	100.4	99.4 ↓
Western Cape - Other Rainfall	269.55	22		5	16	1	94.4	69.2	68.4 ↓
Western Cape -	_								
Winter Rainfall	1 596.80	22			11	11	95.4	85.6	86.9 ↑
Western Cape - Total	1 866.35	44	0	5	27	12	95.3	83.2	84.2 ↑
Grand Total:	32 020.47	222	1	13	143	65	82.4	96.5	96.2 ↓

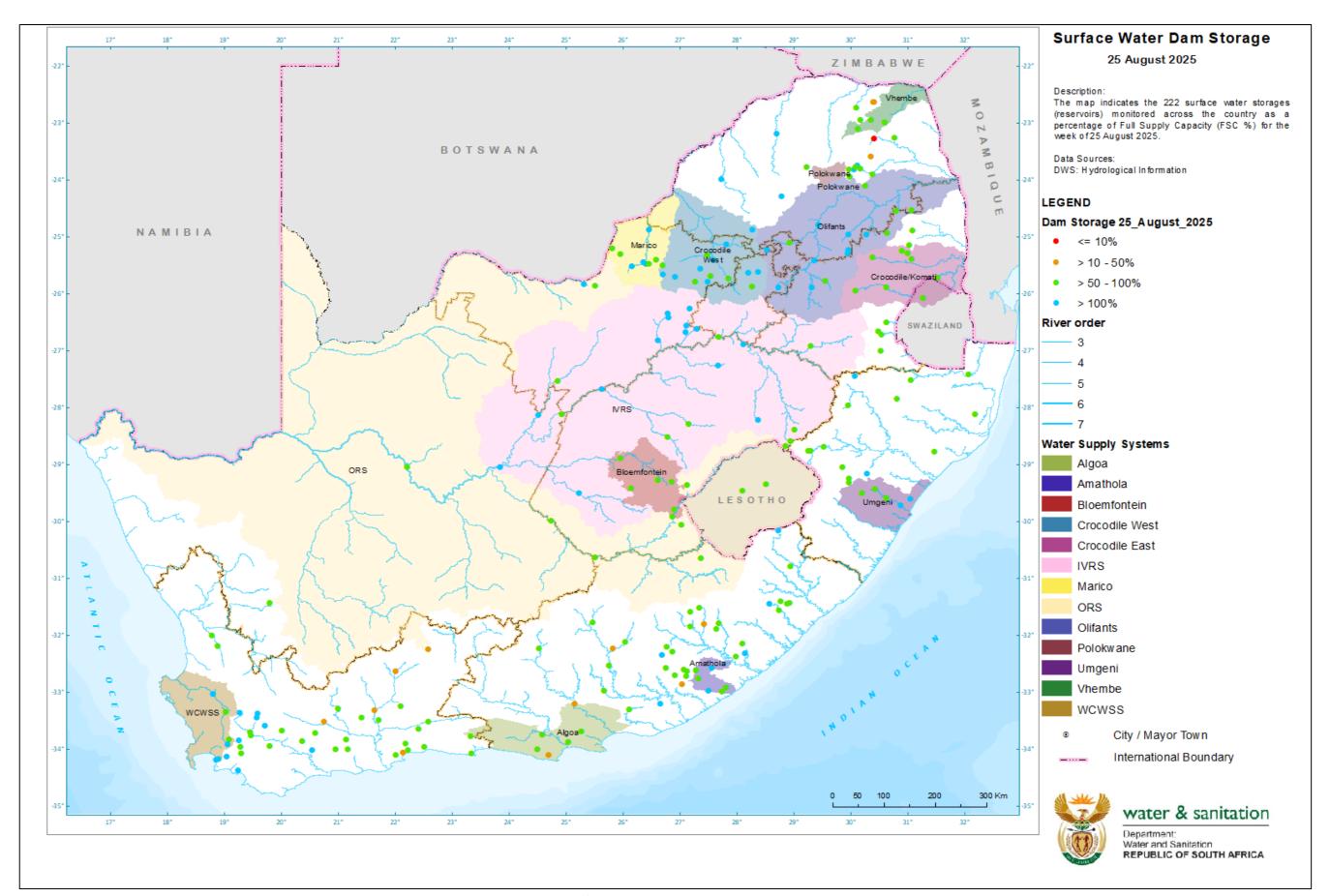


Figure 5: Surface Water Storage Levels – August 2025

The comparison of the storage levels per province (plus the Kingdoms of Eswatini and Lesotho) for August 2024 and August 2025 is graphically presented in Figure 6. Western Cape showed a decline in dam storage by 11% of FSC, while the North West is showing the most significant increase at +30.3%, year-on-year. The increase in the overall dam storage indicates higher-than-normal stream flows, as a result of above-normal rainfall received during the past months. The other notable increases were observed in Free State (+19.8%), Northern Cape (+16.2%), and Gauteng (+11.6%). The Kingdoms of Eswatini and Lesotho experienced increases of 4.4% and 12.7%, respectively, compared to the previous year.

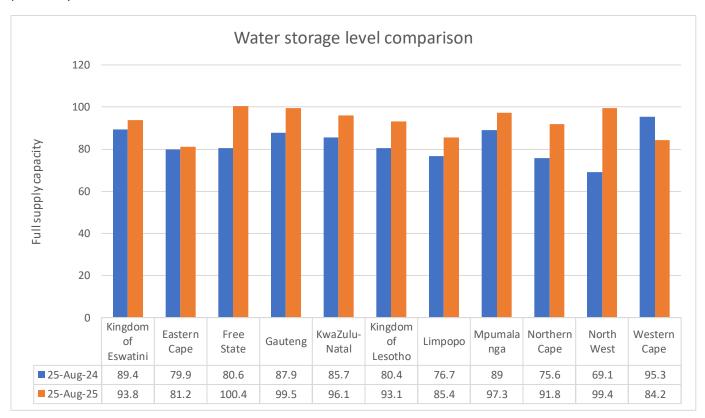


Figure 6: Water Storage Levels August 2024 vs. August 2025.

The comparison between August 2024 and August 2025 of the country's five largest dam storage is presented in Table 2.

Table 2: Storage Levels comparison for the Five Largest storage dams (by volume).

Reservoir	River	Province	Full Supply Capacity (Mm³)	25 August 2024 (% FSC)	25 August 2025 (% FSC)	Difference (%)
Gariep Dam	Orange River	Free State	4 903.45	75.5	98.2	+22.7
Vanderkloof Dam	Orange River	Free State & Northern Cape	3 136.93	99.0	99.3	+0.3
Sterkfontein Dam	Nuwejaarspruit River	Free State	2 616.90	98.0	99.0	+1.0
Vaal Dam	Vaal River	Free State	2 560.97	45.4	107	+61.6
Pongolapoort Dam	Phongolo River	KwaZulu-Natal	2 395.24	83.5	94.9	+11.4

The surface water storage levels at the five major dams in the country exceed 90%, with Gariep and Vaal Dam showing increases of 22.7% and 61.6%, respectively, compared to the previous year.

Earlier this year, the Vaal Dam's storage levels dropped to 24.1% of FSC. However, by the end of August 2025, the dam's capacity reached 107% of FSC, exceeding last year's levels by almost 50%.

Another improvement was observed in the critical level category at the Middle-Letaba Dam in Limpopo, which improved by 5.1% to reach 6.1% of FSC at the end of August 2025, when compared to the previous year (Table 3).

Table 3: Dam currently below 10% of FSC compared to last year

Reservoir	River	Province	Full Supply Capacity (Mm³)	25 August 2024 % FSC)	25 August 2025 (% FSC)	Difference (%)
Middel-Letaba	Middel-Letaba	Limpopo	171.93	1.0	6.1	+5.1
Dam	River					

Figure 7 presents the 24-month Standardised Precipitation Index (SPI) analysed at the end of July 2025. The map shows that some parts of the Eastern Cape (Sarah Baartman DM) and Mpumalanga (Ehlanzeni DM) provinces experienced severe drought in the last 24 months. Moreover, a few District Municipalities (DMs) indicated a moderate drought status. These include parts of Thabo Mofutsanyana DM in North West, ZF Mgcawu in the Northern Cape, City of Cape Town in Western Cape, Ehlanzeni DM in Mpumalanga, Sekhukhune and Capricorn DMs in Limpopo, and Sarah Baartman, Chris Hani, and Alfred Nzo DMs in the Eastern Cape.

District Municipalities

The year-on-year comparison of water storage levels per district municipality is presented in Figure 8. Capricon DM, Ngaka Modiri Molema DM and Sedibeng DM experienced the largest increase (>60%) in dam storage levels in August 2025 compared to the same time last year. Namakwa DM indicated a significant increase (>40%) in dam storage level over the past year. Central Karoo district municipality experienced significant declines (>-20%) in dam levels.

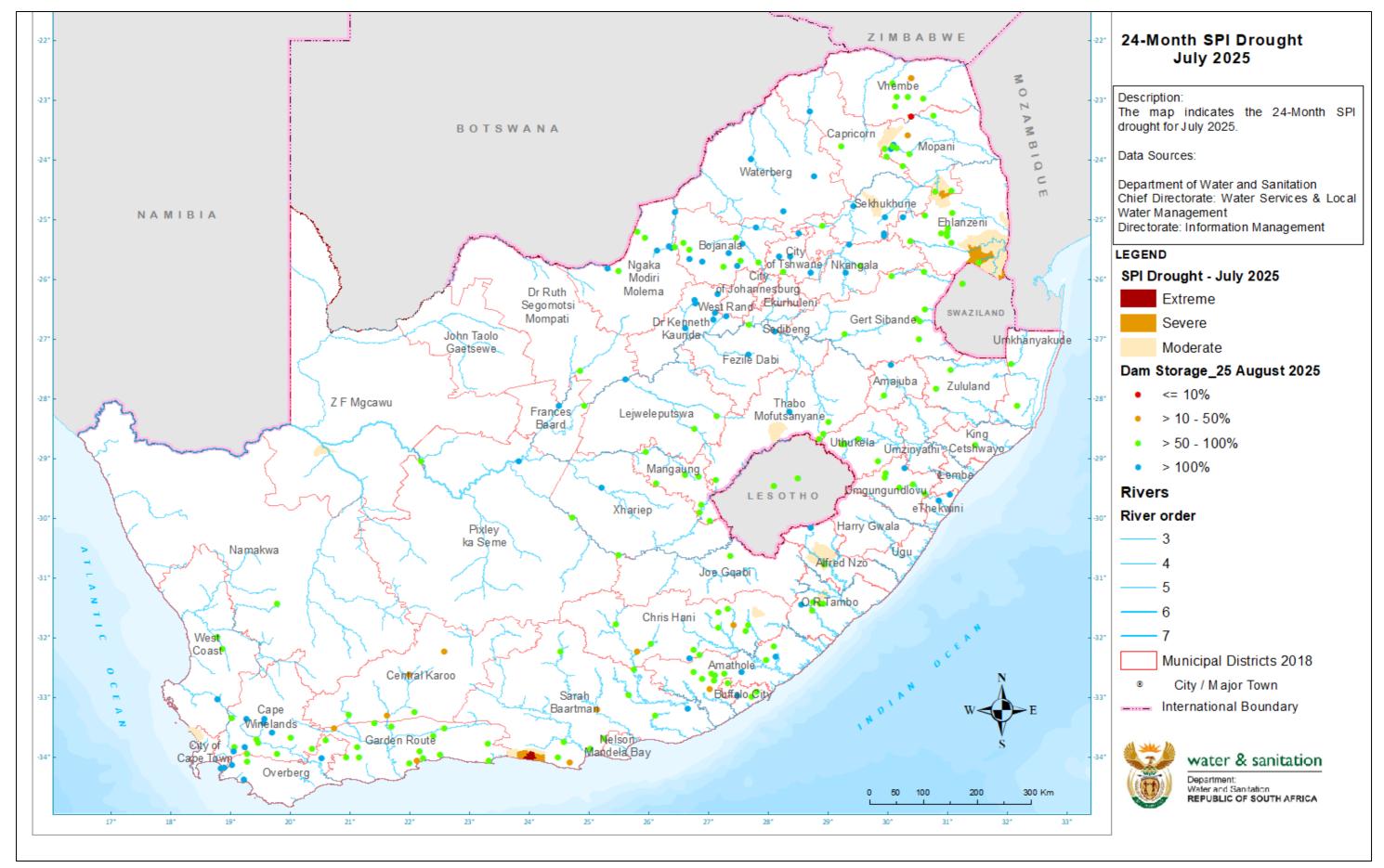


Figure 7: 24-Month Standardised Precipitation Index (SPI) – July 2025, including dam levels - August 2025.

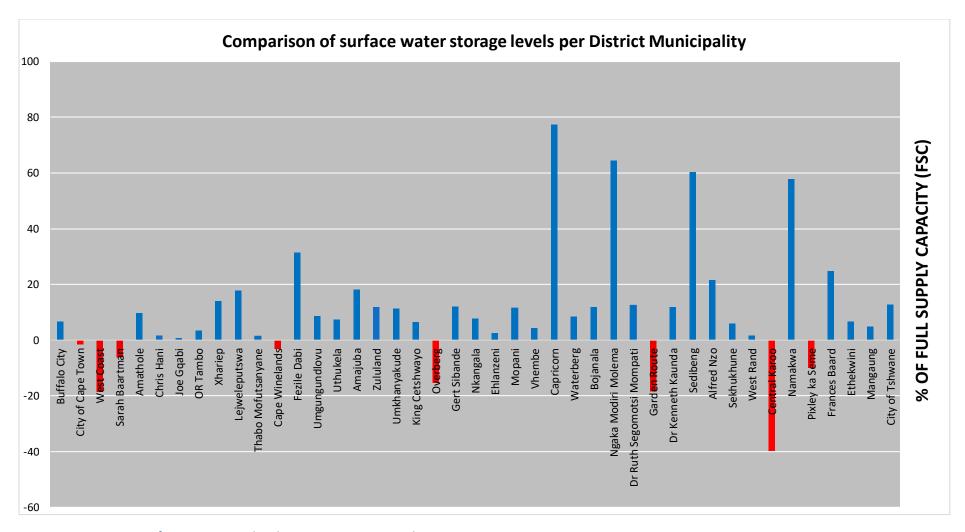


Figure 8: Comparison of water storage levels per District Municipality August 2024 vs August 2025.

Water Supply Restrictions

The water supply systems and their respective restrictions are given in Table 4. Due to infrastructure limitations, permanent restrictions are applicable for the Polokwane and Bloemfontein Water Supply Systems.

Table 4: Water Supply Systems with Restrictions

System Name	Areas	Water Users	% Restrictions	Gazette Information	Next Review
Algoa WSS	Kromme subsystem	NMBM & Kouga LM Irrigation	23% domestic & industrial 43% irrigation	Recommended but not gazetted	Nov' 2025
Mangaung WSS	Caledon- Modder	Mangaung Metro	25% domestic & industrial when below 95%	13 Sep' 2024 Gazette no.5200	May 2025
Liebensbergvlei River	Run-off River abstractions Free State towns and irrigation	Towns of Bethlehem, Reitz, Tweeling within Dihlabeng, Mafube and Nketoana Local Municipalities	Irrigation users to abstract water on an alternative day basis Municipalities to use water sparingly	20 Sep' 2024 Gazette no.5223	Once off until the end of the LHWP tunnel shutdown for the planned maintenance
Middle Letaba/ Nsami	Middle Letaba/ Nsami	Irrigation Mopani Municipality	100% irrigation 25% domestic	28 Jun' 2024	May 2025
Mutshedzi Dam	Mutshedzi Dam	Makhado Municipality	35% domestic		May 2025
Nzhelele	Nzhelele	Nzhelele Government Irrigation Scheme Nzhelele Regional Scheme	20% domestic 20% irrigation	28 Jun' 2024	May 2025
Nwanedi/ Luphephe	Nwanedi/ Luphephe	Mutale Local Municipality Irrigation	20% D&I 45% irrigation	28 Jun' 2024	May 2025
Polokwane Water Supply System Letaba System	Seshego, Mashashane, Houtrivier and Chuniespoort Dams Ebenezer and Groot Letaba System	Capricorn District, Polokwane Local Municipality Groot Letaba Water Users Association, Mopani Municipality	30% domestic & industrial water uses 27% agricultural use	28 Jun' 2024	May 2025

The National Water Supply Systems' dam storage levels are presented in Table 5. The Integrated Vaal River System is the largest and most economically significant system in South Africa, comprising over 14 dams that collectively hold more than 10 546 Mm³. The second-largest system is the Orange, with only two major dams, totaling over 7 996 Mm³.

<u>Table 5: Water Supply Systems storage levels August comparisons.</u>

Water Supply	Capacity	25	18	25	System Description
Systems/ Clusters	in 10 ⁶ m³	August 2024 (% FSC)	August 2025 (% FSC)	August 2025 (% FSC)	
Algoa System	282	76.6	66.9	66.4	5 dams serve the Nelson Mandela Bay Metro, Sarah Baartman (SB) DM, Kouga LM and Gamtoos Irrigation: 1. Kromrivier Dam 2. Impofu Dam 3. Kouga Dam 4. Loerie Dam 5. Groendal Dam
Amathole System	241	93.7	98.8	98.4	6 dams serve Bisho & Buffalo City, East London: 1. Laing Dam 2. Rooikrans Dam 3. Bridle Drift Dam 4. Nahoon Dam 5. Gubu Dam 6. Wriggleswade Dam
Klipplaat System	57	95.8	100.1	100	3 dams serve Queenstown (Chris Hani DM, Enoch Ngijima LM): 1. Boesmanskrantz Dam 2. Waterdown Dam 3. Oxkraal Dam
Butterworth System	14	81.1	99.5	99.2	Xilinxa Dam and Gcuwa weirs serve Butterworth
Integrated Vaal River System	10 546	78.6	100.7	100.4	1. Vaal Dam 2. Grootdraai Dam 3. Sterkfontein Dam 4. Bloemhof Dam 5. Katse Dam 6. Mohale Dam 7. Woodstock Dam 8. Zaaihoek Dam 9. Jericho Dam 10. Westoe Dam 11. Morgenstond Dam 12. Heyshope Dam 13. Nooitgedacht Dam 14. Vygeboom Dam
Luvuvhu	225	94.3	94.6	94	3 dams serve Thohoyandou etc: 1. Albasini Dam 2. Vondo Dam 3. Nandoni Dam
Bloemfontein	219	83.6	83.2	82.7	4 dams serve Bloemfontein, Botshabelo and Thaba Nchu: 1. Rustfontein Dam 2. Groothoek Dam 3. Welbedacht Dam 4. Knellpoort Dam
Polokwane	254.27	89.8	101	100.6	2 dams serve Polokwane 1. Flag Boshielo Dam 2. Ebenezer Dam

Water Supply Systems/ Clusters	Capacity in 10 ⁶ m ³	25 August 2024 (% FSC)	18 August 2025 (% FSC)	25 August 2025 (% FSC)	System Description
Crocodile West	444	90.7	97.8	96.8	7 dams serve Tshwane up to Rustenburg: 1. Hartbeespoort Dam 2. Rietvlei Dam 3. Bospoort Dam 4. Roodeplaat Dam 5. Klipvoor Dam 6. Vaalkop Dam 7. Roodekopjes Dam
uMgeni System	923	88.6	96.7	96	5 dams serve Ethekwini, iLembe & Msunduzi: 1. Midmar Dam 2. Nagle Dam 3. Albert Falls Dam 4. Inanda Dam 5. Spring Grove Dam
Cape Town System	889	102.8	90.6	91.9	6 dams serve the City of Cape Town: 1. Voelvlei Dam 2. Wemmershoek Dam 3. Berg River Dam 4. Steenbras-Lower Dam 5. Steenbras-Upper Dam 6. Theewaterskloof Dam
Crocodile East	159	89.1	98.5	97.5	Kwena Dam supplies Nelspruit, Kanyamazane, Matsulu, Malelane and Komatipoort areas & Surroundings
Orange	7 996	84.6	98.9	98.7	 2 dams service parts of the Free State, Northern and Eastern Cape Provinces: 1. Gariep Dam 2. Vanderkloof Dam
uMhlathuze	301	90.6	97.4	97	Goedertrouw Dam supplies Richards Bay, Empangeni Towns, small towns, surrounding rural areas, industries and irrigators, supported by lakes and transfer from Thukela River

The Rehabilitation of iSimangaliso Wetland Park, KwaZulu-Natal

The iSimangaliso Wetland Park, formerly known as the Greater St. Lucia Wetland Park, is a UNESCO World Heritage Site located in the KwaZulu-Natal province of South Africa. It is one of the country's most ecologically diverse and significant conservation areas, covering approximately 3,280 km² along the northeastern coast of KwaZulu-Natal. The Park plays a crucial role in environmental conservation, as it harbours several threatened and endangered species including three major lake systems, eight interlinking ecosystems, 700-year-old fishing traditions, most of South Africa's remaining swamp forests, Africa's largest estuarine system, 526 bird species and 25 000-year-old coastal dunes – among the highest in the world.

iSimangaliso also contains four wetlands of international importance under the Ramsar Convention. This dynamic ecological system comprises multiple interconnected wetlands of varying sizes and characteristics (i.e., Hydrogeomorphic units).

Large areas of the system were historically degraded due to anthropogenic activities such as commercial forestry and human settlement development. The Park Authority in conjunction with the Department of Forestry, Fisheries and the Environment (DFFE), through the Working for Wetlands Programme has made substantial investments to rehabilitate degraded areas and maintain the system's ecological integrity through the development of rehabilitation plans and associated implementation activities. These areas have since been cleared of forestry plantations, and earthworks in the form of 'historical forestry road removal' were the predominant rehabilitation intervention during the 2024/2025 financial year as guided by the Park's wetland rehabilitation plan. Error! Reference source not found.and Error! Reference source not found.show the progress of the historical road removal.



Figure 9: Historical road project site before revegetation



Figure 10: Historical road project site after revegetation

The Working for Wetlands Programme has adopted a multipronged approach towards wetland rehabilitation as it aims to address various socio-ecological challenges such as:

- Invasive Species Control: Non-native plant species threaten the natural wetland ecosystem. Rehabilitation often involves the removal of these invasive species to make room for native vegetation, which in turn supports native wildlife.
- ❖ Water Quality Improvement: Wetlands are critical in filtering and improving water quality. Efforts to rehabilitate these systems may focus on reducing pollution, such as nutrient overload from agricultural runoff, and restoring the natural hydrological flow.
- * Restoration of Natural Hydrology: Many wetlands in the park have been altered by human activities such as drainage for forestry or development. Restoration includes re-establishing the natural water flow and flood regimes that are vital for wetland species and plant growth.
- Biodiversity Conservation: Wetland rehabilitation is also crucial for preserving the park's diverse range of wildlife, including migratory birds, amphibians, and fish. By restoring wetland habitats, the park supports these species' survival and increases their population numbers.
- Community Involvement: Local communities are involved in rehabilitation efforts through the Expanded Public Works Programme (EPWP) model, both as stakeholders in preserving the park's natural resources and as participants in eco-tourism ventures, creating a balance between conservation and sustainable development.

The information on wetlands rehabilitation projects was supplied for the National State of Water Report 2024 by Esmeralda Ramburran, Ndumiso Dlamini, and Theo Naidoo, from the Department of Forestry, Fisheries and the Environment (DFFE).

Compiled by:

Hulisani Mafenya, Nokulunga Biyase, Anna Ramothello, Mirrander Ndhlovu, Thandekile Mbili and Joshua Rasifudi

For technical inputs and inquiries:

Sub-Directorate: Integrated Water Resource Studies:

Tel: 012 336 6856

Email: lntegratedWaterStudies@dws.gov.za

Accessible on the Website:

National State of Water Reporting Web page:

https://www.dws.gov.za/Projects/National%20State%20of%20Water%20Report/MonthlyBulletin.aspx

Department of Water and Sanitation
Private Bag X313
Pretoria
0001

Glossary

Term Definition

COL cut-off low

DM District Municipality

DWS Department of Water and Sanitation

ENSO El Niño-Southern Oscillation

FSC Full Storage Capacity

LHDA Lesotho Highlands Development Authority (LHDA)

SANS:241 South African National Standard for drinking water quality

SAWS South African Weather Services

SPI Standardized Precipitation Index. A widely used index to characterise

meteorological drought on a range of timescales. On short timescales, the SPI is closely related to soil moisture, while at longer timescales, the SPI can be related to groundwater and reservoir

storage

WSS Water Supply System. A typical town/city water supply system

consists of a gravity or pumping-based transmission and distribution system from a local or distant water source, with a needed water

treatment system

References

SAWS,	2025. Seasonal South Africa.	Climate Wa	atch: July to	Nov 2025	(Issued: 0!	5 August 2025).	SAWS,	Centurion,