



WATER PARTNERSHIPS OFFICE  
a partnership between DWS, DBSA and SALGA

## ENHANCING LOCAL GOVERNMENT SOCIO-ECONOMIC DEVELOPMENT AND WATER RESILIENCE: CLIMATE RISK AND VULNERABILITY ASSESSMENTS, WATER SERVICES SKILLS SUPPLY-DEMAND FORECASTING AND ECO-INDUSTRIAL PARKS

14<sup>th</sup> IWA International Conference on Water Reclamation and Reuse, 16-20 March 2025, Cape Town, South Africa

### Background

As one of two economic infrastructure pillars (water and energy), effective and efficient potable water supply and sanitation services are the foundation for economic prosperity and social stability and are the primary mandate of local government. However, the current dire state of water services in South Africa's municipalities has reached a crisis as shown in the Blue-, Green- and No-Drop Reports released by the Minister of Water and Sanitation in 2023. These reports showed that, at a country-wide average, among municipalities:

- 46% of drinking water systems did not meet microbiological standards;
- 67.6% of wastewater treatments failed to adequately process sewage and other wastes;
- 40.8% of water was lost due to leaks or was unaccounted for.

According to the No-Drop Report, there is a concern about the "decline in water loss management practices, lack of metering and poor infrastructure maintenance in the majority of municipalities." Furthermore, "water demand is expected to sharply increase over the next 20 years while the water supply is likely to decline, therefore anticipating a projected supply deficit of 17% by 2030" (*DWS NWSMP, 2018*). On 07 April 2024, the Deputy President announced that he was informed by the President to head-up a water task team in order to address the water crisis in the country which had reached the point where the national government would step in where necessary, with many areas of the country already seeing their taps run dry, water cuts (or "water shedding" as government has described it) and unsafe drinking water (<https://businesstech.co.za/news/government/766471/governments-answer-to-the-water-crisis/>).

Water security at the local government level is therefore of paramount importance to ensure and sustain social stability and economic prosperity, particularly under circumstances of rapid and unpredictable changes relating to climate, demographics (population growth, migration patterns, economic status, etc), urban and industrial development ambitions and environmental sustainability. Three project initiatives to support local government with addressing water security and resilience under these current and potential future changing circumstances through effective and efficient water services (potable water supply and wastewater management) are the following:

1. Municipal Climate Risk and Vulnerability Assessments (WPO Water Reuse Programme);
2. Water Services Skills Supply-Demand Forecasting (LGSETA); and
3. Eco-Industrial Parks (CSIR National Cleaner Production Centre [NCPC])

This session will:

- Share the findings and status of the three initiatives; and
- Solicit further inputs, guidance and feedback from sector role-players to identify potential challenges and gaps for enhancing the interventions as these are implemented.

**Programme Chair – Mr Johann Lubbe, Water Partnership Office, DBSA**

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10 mins	Welcome – <i>Johann Lubbe</i> , Head: Water Partnership Office, DBSA
15 mins	Municipal Climate Risk and Vulnerability Assessment and Primary Screening: Synthesis Report – <i>Maronel Steyn</i> , Senior Researcher, CSIR
15 mins	Local Government Skills Demand and Supply Forecasting Model – <i>Ashwin Seetal</i> , IWRM Specialist, CSIR
15 mins	The Eco-Industrial Parks Programme – <i>Bernd Oellermann</i> , Programme Manager, CSIR
5 min	Closure and Way Forward – <i>Johann Lubbe</i> , Head: Water Partnership Office, DBSA