



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

ADDRESS BY Ms. NOMVULA MOKONYANE, MINISTER OF WATER AND SANITATION DURING THE WESTERN CAPE WATER INDABA AT GOUDINI SPA IN RAWSONVILLE, WESTERN CAPE.

16 MAY 2017

SPEAKER'S NOTES:

INTRODUCTION

- The water sector is critical for government's transformation and development objectives. Providing safe and accessible water supply and sanitation services profoundly affects poor people's daily lives.
- Water is life and has a catalytic cross-cutting impact on socio-economic development as well as peace and stability. Sanitation is dignity.
- Water is enshrined as a basic human right in our Constitution and specifically two sections of the Bill of Rights:
 - Everyone enjoys the right to an environment that is not harmful to their health or well-being;
 - Every citizen of South Africa enjoys the right of access to sufficient food and water.

- Efforts to manage protect and preserve water as a critical resource in a sustainable manner speaks to the collective responsibility of all the stakeholders in the water sector.
- Growing populations and economies, changing lifestyles and global climate change are all increasing the pressure on the planet's water resources.
- People and nature alike are threatened by a lack of responsible water management. Water is a resource with a diversified utility, it is the basis of life itself and it is not produced.
- Water is and remains a shared resource critical for human health, driving the economy, and maintaining freshwater species. Yet due to a myriad of factors, including growing demand, climate change and pollution, fresh water in many regions is increasingly at risk.
- The last two to three years have been difficult for the country, based on the hydrological drought that has devastated large parts of the countries comprising the Southern African Development Community. The drought has truly not been just a South African experience but has been felt across the region.
- Although, the country has received some relief with rain in some part, it need to be stated that in the whole we are not yet out of the woods.
- Based on the monitoring results as at 1 May 2017, the average dam levels have once again decreased slightly week on week and are down by 0.2% to 72.7% compared with the same time last year when levels were at 54.3%.

- There has been a slight decrease in capacity in all provinces (with the exception KZN where there has been a slight increase).
- The biggest concern we have about the current condition of dams as we are moving out of the period for summer rains is whether enough water from the summer rains will have reached our reservoirs.
- In addition, the Winter rainfall are also of great concern as we have not yet had any significant rain to relieve pressure on the dams in the winter rainfall area.
- Provincial levels as at 1 May 2017 compared to the preceding week are as follows: Eastern Cape (down 0.3% to 61.9%), Free State (down 0.3% to 85.3%), Gauteng (down 0.2% to 92%), Kwazulu-Natal (up 0.8% to 53.6%), Limpopo (down 0.1% to 78.5%), Mpumalanga (down 0.2% to 79%), Northern Cape (down 0.2% to 98.1%), North West (down 0.4% to 90.5%), Western Cape (down 0.8% to 20.6%).
- It is also vital to note that the country's groundwater levels remain low and they will take a good few years to recover. This in line with the assessments that a full recovery from the drought will be seen in two to three years time.
- The Indaba seeks to come up with short, medium and long-term solutions to the drought that is currently gripping the province. For the past two years, Western Cape (WC) has received insufficient rainfalls. This has highly affected the Western Cape Water Supply System (WCWSS) and raised concerns for water security.

BACKGROUND

- The Western Cape Province is situated largely in a winter rainfall area, which is characterised by wet winters and dry summers. Western Cape Province therefore was not affected by the Cyclone Dineo induced rains that most of the provinces benefited from in February. By the end of February 2017, the City of Cape Town was declared a disaster area.
- Since the last rainy season, however the western, central to northern parts of the province have received below normal rainfall accompanied with high temperature, whilst the Southern Cape areas have received normal to above normal rainfall.
- The Province of the Western Cape is still experiencing an extreme drought and a number of municipalities are in the process of, or have already declared local drought disasters in terms of the Disaster Management Act.
- National Disaster Management Committee held a meeting on 10 April 2017 in Cape Town to consider inputs by the Municipalities in the Western Cape with regard to declarations as summarized in the table below:
- A number of interventions have been implemented by DWS and the Provincial Department of Agriculture (improving water and food security), Department of Local Government (assisting municipalities to improve water supply) and Development Planning (improved water security including improvement of environmental resources).
- The Integrated Western Cape Water Supply System (WCWSS) serving City of

Cape Town towns up the west coast and Irrigators is currently being operated by DWS and under restrictions imposed by the Department of Water and Sanitation, 20% for domestic and industrial users and 30% for agricultural use.

- The combined capacity of the 43 dams which get monitored on a weekly basis was 20.1% on 8 May 2017, compared with 30.6% at the same time last year. This is the lowest recorded level in the last 30 years (ie: since 1987).

GROUNDWATER RESOURCES

- The Department (DWS) is also monitoring groundwater levels and trends, over the past two year period from January 2015 to January 2017 still shows a declining trend.
- In the Western Cape, 63% of the monitoring boreholes have shown a decline during this period. The areas where the most critical decline in water levels have been observed during the past 24 months include:
 - Beaufort West in the Karoo;
 - Cape Town, Cape wine lands and Boland;
 - The West coast and adjacent areas from Saldanha Bay; and
 - Further north to Lamberts Bay and Bitterfontein;
- Ground water levels will respond and recover much slower than our surface water sources (time lag). The rate of recovery will also be influenced by the severity of the current drought conditions. Taking into consideration the declining levels, water restrictions will also have to be considered for users who rely on groundwater.

- While the natural groundwater levels have dropped to a limited extent in this dry period, Localized pressure points are at risk, where extensive groundwater is abstracted (over abstraction).
- Despite the low rainfall there remains significant groundwater in storage across the Province, which could be tapped into for emergency supplies.
- Considering that there is potential for groundwater development to improve the long term security of municipal supplies, this does require well planned detailed investigation to ensure sustainability.
- The Western Cape Provincial Disaster Management Centre (PDMC) will be assisting municipalities with the appointment of Geo-hydrologists to give technical advice to municipalities on the identification of new borehole sites and the sustainable use of existing and future ground water abstraction.

Augmentation Options to meet future needs for the Western Cape Water supply in Particular:

- Through the Reconciliation Strategy for the Western Cape Supply System, a number of different water requirement scenarios have been considered. The system is currently in surplus due to the completion of the Berg River Dam (2006/07). This together with the implementation of the Water Conservation/Water Demand Management (WC/WDM) measures by the City of Cape Town (implementing a 10-year water conservation and water demand management strategy), the lowered growth in water requirements being experienced, means that the next augmentation project should come on line by at least 2020.

- The current planning scenario is that WC/WDM will achieve a further reduction in use so that the system only goes into deficit between 2020 and 2022. By this time the next augmentation option will have to be in place. This therefore has quite critical implications for the implementation of the capital-intensive new augmentation options.
- WC/WDM has also been prioritized by the Agricultural Sector given that agricultural water use is capped by its allocation. Water losses have therefore to be minimised so as to optimise agricultural production within the limitations of the allocation.

THE FOLLOWING INTERVENTION OPTIONS COULD BE IMPLEMENTED IN TIME FOR THE EXPECTED DEFICIT BETWEEN 2020 AND 2022:

- Surface water schemes: The Department undertook feasibility studies on various surface water options, with the augmentation of Voëlvlei Dam (Phase 1) being the most favourable. The Department is currently addressing the Environmental Impact Assessment EIA so that this scheme can be implementation-ready should it be selected.
- Desalination of seawater: A feasibility study was commissioned by the CCT in July 2012 and is close to completion.
- Re-use of water: A feasibility study was commissioned by the CCT in May 2014 and is in progress.

- Table Mountain Group Aquifer (TMG): The City of Cape Town is committed to proceed with the investigation of the TMG Aquifer. The next phase of the study is scheduled to run over three years.
- The decision on the next augmentation option should have already been made in 2015. Given that, the next augmentation option to be implemented will meet water requirements for a limited time only and would therefore have to be followed in short order by other interventions.

The four possible interventions which could be moved forward most rapidly are:

- the Berg River-Voëlvlei (Phase 1) augmentation scheme - diverting surplus winter water into Voëlvlei Dam;
 - fast-tracked development of the Table Mountain Group Aquifer;
 - water re-use; and
 - seawater desalination.
- While none of the abovementioned augmentation options will bring any immediate relief (within 6 months), it is extremely important that early and urgent decisions are taken on the next projects to be implemented.
 - The project which is possibly the closest to implementation-ready and would buy some time is the development of the Table Mountain Group Aquifer. The City of Cape Town is in the process of appointing service providers to start drilling production boreholes (they have followed emergency procurement procedures having declared a Local drought disaster).

- The next project which should commence as a matter of urgency is the Berg River-Voëlvlei (Phase 1) augmentation scheme.
 - This project involves the pumped abstraction of winter water from the Berg River to improve the yield of the Voelvlei Dam. The estimated cost of the project is R500 million.
 - We are very advanced with the EIA and we expect that authorization could be granted by the end of 2017. A submission has been routed through the Office of the DG for Minister to consider implementation of this project as an emergency scheme and to give a directive to TCTA to raise the necessary funding and to implement the project. **On an emergency basis construction could commence during 2018.**

PROPOSED WAY FORWARD FOR CONSIDERATION

A suggested way forward in dealing with the current drought and future water requirements could be the following:

- All Municipalities to intensify their Water Conservation and Water Demand Management programmes which must include leak detection and leak repairs and consider the installation of flow restrictors;
- The implementation of by-laws for water restrictions if these are not already in place;
- Agricultural Sector to intensify the application of restrictions across all

water intensive agricultural activities;

- Investigate alternative water resources such as groundwater, grey water use and rainwater harvesting;
- Take an early and urgent decision regarding the next augmentation project for the Western Water Supply System, suggest that the Table Mountain Group Aquifer (TMG) and the Voelvlei Augmentation schemes be considered and if acceptable should be implemented under emergency provisions (drought declaration and Section 110 of the NWA);
- Start engagements with key stakeholders on financing options for the selected augmentation options.
- All municipalities in the Western Cape must ensure that their existing infrastructure is brought back into 100% operation and in particular schemes (such as desalination plants) which were funded under previous drought interventions are brought back into operation as a matter of extreme urgency.
- Continue to monitor the implementation of the current intervention measures - including restrictions - and where and when necessary implement harsher levels of restrictions - such as the Level 4 restrictions being considered by the City of Cape Town.

Dankie

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