

BUDGET AND POLICY STATEMENT

THE DEPARTMENT OF WATER AND SANITATION, VOTE 36

By Mr. David Mahlobo MP,

Deputy Minister of Water and Sanitation

National Assembly, Cape Town

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Honourable Speaker, Ms Thandi Modise

HE Cyril Ramaphosa, President of the Republic of South Africa HE DD Mabuza, Deputy

President of the Republic of South Africa

Hon. LN Sisulu, Minister of Human Settlements, Water and Sanitation and other
Hon Ministers

Hon. Pamela Tshwete, Deputy Minister of Human Settlements and other Deputy
Ministers

Hon. P Majodina and D Dlakude- Chief Whip and Deputy Chief Whip

Hon Rosina Semanya, Chairperson of the Portfolio Committee on Human Settlements,
Water and Sanitation and other Members

Honourable Members of Parliament

Leadership of our Entities- Chairperson, Members of the Boards, CEOs and Senior
Executives

Leadership of various stakeholders in our sector and civil society Esteemed Guests

Fellow South Africans

INTRODUCTION

1. On the 18 July 2019, the nation and the citizens of the world will dedicate 67 minutes of their precious time to celebrate and reflect on the life and times of our icon, the first President of a democratic and free South Africa. HE the late President Nelson Mandela would have turned 101 years if he was still alive.
2. Madiba in his biography "*Long Walk to Freedom*" said: "*I have walked that long road to freedom. I have tried not to falter. I have made missteps along the way. But I have discovered the secret that after climbing a great hill, one only finds that there are many more hills to climb. I have taken a moment here to rest, to steal a view of the glorious vista that surrounds me, to look back on the distance I have come. But I can only rest for a moment, for with freedom come responsibilities, and I dare not linger, for my long walk is not ended.*"
3. A lot of progress has been achieved in the last twenty-five years in changing the lives of our people for the better but we are the first to admit that more still needs to be done.
4. South Africa and the world are in the midst of profound challenges but equally this is an epoch full of opportunities. The prospects are bright whilst challenges might look severe. Our people continue to yearn to live a better life free from poverty, unemployment and inequality.
5. Inspired by the call by HE President Cyril Ramaphosa of an advent of a New Dawn - a period of unity, renewal and rejuvenation, we are hard at work to grow South Africa together.

WATER SECURITY

6. We live in a country where water is scarce, that only 30 or so other countries have less water per person than we do.
7. Our climate is far more variable than many other countries. In one year, the amount of rain that falls in one place may be half the annual average; in the next year it may be twice the average. Now we must take account of climate change, which will make our natural water supplies even more difficult to predict and manage.
8. We want water security to ensure that people will always have enough water to meet their basic needs, that industry can invest knowing that there is a reliable supply. While we cannot guarantee rain for our farmers, we must ensure that their irrigation supplies

are predictable and well managed.

How are we going to achieve our water security?

9. In well-off urban communities, water services are generally of a high standard. In many poor communities, however, taps have run dry, unsafe water and unsanitary toilets (or no toilets at all) are part of people's daily lives.
10. Water crises may arise if the right investments, innovations and management decisions are not made at the right time. This could see jobs and livelihoods being affected, taps running dry and diseases spreading unnecessarily.
11. With a growing population and economy, demands for water will continue to grow. Some of the new demands will be met by building new infrastructure.
12. We must start from the planning of our supplies and then in the development and management of the water resource infrastructure for which South Africa is well respected throughout the world. We must also protect the scarce resource from pollution and over-use, which can damage the environment on which we depend.
13. Our world-class water resource planning has been neglected over the past few years as we concentrated on providing basic water supply to our people. We will re-invigorate our long range planning capabilities. To do this, we will build on the technical skills still available within the sector.
14. The 4th industrial revolution is already part of the water business. Our planning already uses complex hydrological models, which can predict whether our systems will have enough water two, three and as far as six years into the future. If Cape Town had acted on the predictions of our planners back in 2013, the recent drought would not have affected them so severely.

WATER SECTOR REGULATION AND TRANSFORMATION USING TECHNOLOGICAL ADVANCES

15. South Africa has complex challenges of water and energy security, social equity, sanitation and pollution control as well as the challenge of balancing ecological infrastructure and built infrastructure needs in the country. These are further amplified by increased uncertainty brought on by our already high-risk climate and climate change.
16. The information technological revolution can do much more for water management. We

have to monitor water use and water pollution more intensively. But there is a limit to what can be achieved by inspectors on the ground. We must be innovative.

17. The Department has already used satellite images to plot agricultural water use, for licencing purposes. We can do much more with this technology to monitor and manage water quality in our rivers, wetlands and dams.
18. Research and Innovation can play a significant role in building industries, resilience, adaptation and resource sensitivity at local level through the testing of transformative concepts like Water-Energy-Food Nexus, Water and Resource Sensitive Design, the circular economy, and next generation sanitation.
19. The Water Research Commission has been bringing new options to the water mix to enhance water security and lead a paradigm shift away from only big new big build capex type projects, towards testing and modelling new options such as sand water extraction technologies in water constrained areas, testing stormwater harvesting opportunities whereby cities and towns shift from purely demand nodes to integrated supply and demand nodes.
20. With the inclusion of water and sanitation in the industrial action plan, the government has now signalled new opportunities for investment in areas such as sanitation where bold partnerships amongst the Water Research Commission, the Department of Science and Technology and the Bill and Melinda Gates Foundation is leading the way in trying to prevent tragedies like we have seen recently in schools where young children have died.
21. **Big data and analytics** are going to become increasingly critical to managing water security, water quality, and services to our communities.
22. The integration of **earth observation into the satellite remote sensing** for monitoring eutrophication in South Africa's dams and reservoirs.
23. **Using climate forecasts** obtained from the national forecasting centres, to predict drought index for different planting dates, to provide farmers with valuable information prior, during and after each agricultural season minimizing risk and increasing productivity.
24. **New Sanitation:** These are new innovative sanitation solutions that are characterized by:
 - a. low or no water flushing,

- b. Waste is locally treated and is therefore non-sewered,
 - c. Waste is beneficiated to recover water, produce energy through bio-char or biogas or even liquid biofuel or fertilizer or protein recovery as well as others.
25. I learnt recently that academics at the University of Venda have been using satellite imagery to advise neighbouring countries on monitoring and managing the problems of pollution and eutrophication in their dams and lakes. We will develop those capabilities further and put them to use at home!

WATER CONSERVATION AND DEMAND MANAGEMENT

26. We will only succeed if we work together – water is everybody's business. We must use our water carefully and wisely at home, and in our workplaces. We must respect and take care of our public infrastructure and we must make sure that others do the same.
27. Our municipalities need to work together with the Water Boards to ensure efficient government supply systems. The Water Boards have made significant contribution in the bulk infrastructure development and water treatment. We are proud of their contribution and the institutional capability built over the years. The Department has a responsibility to collaborate with and support all these local agencies.
28. In order to align its water sector, South Africa must implement water conservation and demand reduction measures: This can be achieved through a combination of:
- a. **Operations and Maintenance** - Infrastructure repairs (to address non-revenue water), new building codes, incentives to install water-efficient appliances and a tiered water-pricing structure.
 - b. **Education and Awareness** campaigns to raise awareness about high levels of per capita water use and the inherent value of water conservation in a water-scarce country.
 - c. **Increase the amount of water that is reused notably from acid mine drainage and wastewater** - Progress here will not only improve the quality of South Africa's water but also increase the supply.
 - d. **Increase groundwater extraction** - Groundwater is likely an under-used resource in South Africa. Our estimate suggests that there is potential to significantly expand the amount of groundwater extracted. This could be particularly useful for the agricultural sector, where nearly two-thirds of South Africa's water is used and in some rural communities
 - e. **Explore new technologies** - through innovation we have seen consumers

benefit from new technologies being deployed within water treatment and conservation space. Technologies that allow us to instil confidence in the quality of water resources; and these technologies have been proven. It is time to deploy innovative solutions that will bring about cost-effective quality of life.

- f. **Desalination** - currently, desalination technology is prohibitively expensive for South Africa; but as the cost of desalination decreases, it will likely become an increasingly viable option for the major coastal municipalities. However, desalination will not be able to address water scarcity in South Africa's inland areas and will have a limited impact on the agricultural sector, and so likely will only play a small part in South Africa's water future.

Ministerial Response on Pollution of our water resources

- 29. A number of organisations and individuals have raised concerns about the deteriorating water quality of our rivers and dams. Most municipal wastewater treatment works are in critical and poor state causing a lot of pollution to our water systems. There has been neglect that allowed deterioration. In some instances infrastructure has reached a point where it can no longer be used and others require significant investment to repair.
- 30. The real South African Water Crisis is that of Water Quality. The Minister has directed us to establish a national programme to have an Anti-pollution task team comprised of experts from various disciplines and stakeholder groups. Amongst others the Anti-pollution Task Team will conduct a nation-wide assessment of the status of water quality, the architecture of an accessible real-time information system to monitor water quality, including the re-launch of the Green and Blue Drop reports. The development of a 5-year National Water Quality Strategy using the best scientific knowledge, innovation and capacity building mechanisms as well a revisit of the governance arrangements for water quality will follow.
- 31. This team will advise on effective and efficient authorisation of water and waste discharge as provided for in our legislation whilst taking into account the polluter pays principle.

WATER INFRASTRUCTURE PLANNING AND IMPLEMENTATION

- 32. Water infrastructure is a critical component for socio-economic growth imperatives for jobs and transformation. Over the past few years our infrastructure planning and implementation has experienced poor planning, inadequate budgeting, delays in execution, poor maintenance of infrastructure, corruption in procurement, and lack of technical engineering capacity.

33. An implementation model of Khawuleza has been adopted to speed up infrastructure planning and delivery. We are harnessing our capacity in TCTA, Water Boards and DWS Construction Unit to implement certain infrastructure projects with a clear focus to create jobs and promote SMMEs, with 30% of procurement spend targeting women and youth owned enterprises. We will work closely with MISA and COGTA on all the Municipal Water Grants related projects. In our infrastructure designs we shall ensure fit for purpose whilst ensuring maximum use of locally produced components and equipment. **Water Infrastructure grants cannot and should not be diverted!**

CONCLUSION

34. We need institutions that are fit for purpose. We will enhance local arrangements where the people and organisations concerned can come together to solve their local water security problems. Perhaps our catchment management agencies would best be focused on 'problem-sheds' rather than watersheds.
35. Putting the infrastructure development and operation activities into a new structure will enable us to focus on strengthening the critical activities of planning and regulation. We shall streamline and improve our licensing administration to stimulate economic growth and development.
36. We will continue to play our historic role of building the capacity of the developmental state. So we will continue to support students, to recruit and grow competent professionals able to licence and monitor the impact of activities like mines and agriculture on our rivers and groundwater, to regulate and intervene to stop the pollution of rivers by poorly managed municipal wastewater plants, as well as to plan, build and operate the infrastructure on which we depend.
37. Madiba restored our faith and hope when he said: *"I am fundamentally an optimist. Whether that comes from nature or nurture, I cannot say. Part of being optimistic is keeping one's head pointed toward the sun, one's feet moving forward. There were many dark moments when my faith in humanity was sorely tested, but I would not and could not give myself up to despair. That way lies defeat and death."*
38. We need to enhance our existing partnerships with civil society, research institutions, the National Business Initiative, Strategic Water Partnership Network, Mine Water Coordinating Body and other role players.

39. We must also work together where different political parties control local and provincial governments. We should leave water out of our political contestation, it is too important to our people and economy to allow it to be a site of conflict
40. We are building a water secure South Africa, in which every South African will have the opportunity to play their part.
41. Let's Grow South Africa, Together!
42. God Bless South Africa, her sons and daughters!