



## water & sanitation

Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA



## MEDIA STATEMENT

### DWS exploring groundwater as alternative water source for water security

18 June 2019

The Department of Water and Sanitation (DWS) is placing more emphasis and intensifying its groundwater exploration to ensure that groundwater plays a crucial role as a key alternative water resource in our water scarce country.

South Africa is a water scarce country and one the driest countries in the world and also receive about half of the world average in terms of rainfall. Coupled with the reality and impact of climate change, the South African water resources are facing a serious challenge in relation to water supply security. Since the last drought experienced in the country, dams and water resources have not recovered to the state they were before the drought and this is making it difficult to ensure water security based on the surface water as communities are growing and there are new socio-economic developments requiring more water. The situation is basically that there is more and increasing demand but the water resources are shrinking.

As the surface water resources continue to shrink, the country needs to take a serious look at groundwater to ensure water security and reliable supply for all. Groundwater has and is being used a resource in areas that are experiencing drought, areas that are far from water treatment works, developing rural areas and areas with underdeveloped infrastructure so it is now high time to consider it as a crucial and strategic alternative to surface water resources.



Department of Water and Sanitation South Africa



DWS\_RSA



## water & sanitation

Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA



According to the monitoring sites of the Department, groundwater in South Africa is generally of good acceptable quality standards. It should also be noted that there are some quality challenges in areas with high industrial, mining and agricultural activities. Groundwater contamination due to illegal activities such as dumping of waste, illegal sand mining and construction of sanitary systems in areas with shallow groundwater level and or in areas with high hydraulic properties. Groundwater contamination can be prevented by stopping illegal dumping of waste in undesignated dumping areas. All in all, groundwater protection depends on human behavior.

As with surface water, groundwater levels fluctuate in relation to rainfall received during the seasons, declining during the dry seasons and rising during the wet rainy season. This then calls for intensified water conservation and demand management initiatives so as not to deplete even the groundwater that is meant to relieve the strain on the surface water resources.

Other factors that may contribute to the decline in groundwater levels include high abstraction above the amount of recharge into aquifer, therefore it is important that water users register their groundwater abstraction activities so all groundwater use can be known and recorded.

Challenges that are encountered in relation to groundwater is over-exploitation, contamination and unauthorized water uses. Private groundwater users tend to drill, equip and utilise the boreholes without conducting a full borehole test (pump testing). Pump testing helps to understand the behaviour and availability of water in the aquifer and also guide the users on the abstraction rate to avoid over exploitation and to prevent the aquifer from running dry. People who do





## water & sanitation

Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA



not register their water uses to get authorization makes it difficult to quantify groundwater use and protection of groundwater resources is thus sometimes ineffective.

Communities can help by exploiting groundwater in a sustainable manner through conducting a full aquifer investigation (pump testing) before they can start utilising the borehole. They must always contact groundwater institution for recommendations every time they experience a problem regarding groundwater and report leaking pipes and always make sure that the communal taps are closed and children are not playing with water.

Furthermore, they must register their water uses so that protection, management and conservation of groundwater resources can be effective. During the process of registering water uses, water users get to understand the importance and purpose of registering water uses, thus they also partake in conserving water resources.

**End**

**Issued by the Department of Water & Sanitation**

**For more information contact Sputnik Ratau, Spokesperson for the Department of Water and Sanitation on 082 874 2942**

**For media releases, speeches and news visit the Water & Sanitation portal at: [www.dwa.gov.za](http://www.dwa.gov.za)**

