Biennial Ground Water Conference Speech by Ms Buyelwa Sonjica, Minister of Water Affairs and Forestry CSIR International Convention Centre, Pretoria 7 March 2005

Chairperson Honourable Guests Ladies and Gentlemen.

A conference on groundwater must not become "merely" a discussion of technology. We must ask about the technology of groundwater study and use, or geohydrology, what function it has for bettering the lives of our people. We must come to understand the legislation and regulations we already have and what we need to make this resource a sustainable source of life for those who live in the regions and areas where there are supplies of groundwater.

Groundwater in the era since the coming of our democracy in 1994 has gained a new significance.

Firstly, all water resources including groundwater reside in the custody of the state. They are no longer the possession of the owner of the land on which they happen to be found.

Secondly, we are committed by our Constitution to ensure that the right to an adequate amount of clean water is progressively realised in practice. In many rural areas water projects drawing on underground water supplies have been created to give people potable water to meet our Reconstruction and Development Programme goal of 25 litres per person per day from a supply point not further than 200 metres from their homes.

Thirdly, the increasing use of underground water has benefits but also holds dangers of "over using" groundwater and damaging the underground aquifers by over pumping. I mean that more water is pumped than can be replaced by the natural processes of recharging the underground supplies. Therefore Dwaf has undertaken a scientific study of our underground water supplies and potential. A data base has been created that should be of great value in future.

In the immediate past we have not always been successful in overcoming our inertia to put a stop to inadvertent over pumping, and more importantly stopping the deliberate over exploitation of underground water for personal gain. In part that is due to a complex legal problem, insufficient personnel and, until I am convinced otherwise, a lack of will to protect the interests of all of us by protecting our water resources.

An example of the damage that can be inadvertently done is the excessive pumping of fresh water from boreholes on Robben Island to meet the needs of the flood of tourists to that International Heritage Site. The result has been the inflow of sea water to the aquifer and now the total inability to extract any drinking water at all.

One hopes that over a period of years sufficient precipitation will recharge the aquifer forcing the seawater out again. In the meantime every drop of water is either delivered by tank ship from Cape Town or is more recently supplied from a desalination plant that is costly to run.

Something similar happened in the Northern Cape when electric pumps replaced diesel powered pumps allowing the operators to "switch on and forget" about the water supply. Aquifers were pumped dry and the underground channels became blocked with silt so that the underground water system has been totally destroyed. Dinokana in North West province is a case in point where too many boreholes were drilled and the dolomite system has collapsed.

An example of deliberate abuse can be seen in Bronkhorstspruit (and in other areas) where massive overuse of dolomite water bearing systems have seen the catastrophic fall of the water

table during a time of prolonged drought. It is now questionable if the system can restore itself. Sinkholes are a sign of the collapse of the water bearing capacity of the dolomite. There are numerous other examples.

Our National Water Resource Strategy has a place in it for underground water and I therefore expect this conference to tell us more about the capacity of our underground water systems. I am especially interested in establishing the means for regulating, monitoring and controlling the use of these delicate systems that have such a potential for good and are yet so fragile.

We are fortunate to have the services of Cuban geohydrologists who have added their skills to our own to help us get our studies of groundwater underway. Cuba has itself been very forward looking in the study, development and use of groundwater.

We cannot allow our people to be given a false promise of sustainability of their lives and livelihoods only to have their hopes dashed by our own lack of scientific analysis, our forgetting to make our knowledge applicable to present needs, by the carelessness of users or by the deliberate destruction of a public resource for short term personal gain.

It is therefore a challenge and a responsibility of us all – government, the private sector and the civil society - to ensure efficient management of our national resource, water. The database therefore provides the necessary information for groundwater professionals and ordinary citizens to have access to information in order to manage groundwater systems better.

The national groundwater database that used to be an academic reference in the past has rapidly become a vital facility for making informed decisions. The accuracy and validity of data on groundwater is important as it forms the basis for policy making and in our context, the basis for ensuring equitable and sustainable water provision.

This is really a very important conference. I need your guidance on technical matters. I hope you will accept the guidance of the government for what we need to know about underground water to make an impact on the lives of our people.

I wish you well in your quest for knowledge that can be applied to meet the needs of our people, including how to regulate and control the use of underground water in the light of our ever increasing knowledge of this fragile resource.

I THANK YOU.