

Bi-Annual Groundwater Conference
Speech by Mrs LB Hendricks, Minister of Water Affairs and Forestry
Bloemfontein, Free State
8 October 2007

Distinguished Guests,
Programme Director,
Ladies and Gentlemen.

It is a great pleasure for me to be part of this important conference at which experts, researchers, managers, and other stakeholders engage one another on how groundwater resources can better be managed in a sustainable manner.

As one travels around dry parts of South Africa, far away from rivers and other surface water resources, one cannot fail to notice windmills dotted around farmsteads over vast areas of land. That is an indication of the important role that groundwater plays in rural people's lives.

Yet what is very clear to me is that there are still a lot of gaps in our understanding of groundwater in South Africa, with policy makers having more questions than answers: about how much ground water there is? To what extent can we utilize this resource without causing damage to the environment? What is the annual harvest potential of groundwater? How much ground water is current being used? To what extent have we polluted our groundwater with mining and possibly farming activities and other industrial activities?

Conferences such as this one, and the work being done by the people here today, are therefore critical in helping us to understand how we can better utilize this resource and help us to start answering these questions. I am sure that everyone in this room will agree that thus far the government has put much greater emphasis on surface water, to the point where we are able to determine with a reasonable degree of accuracy – how much surface water we have stored in our 320 dams, the water yield per annum from these dams, and the mean annual runoff under natural conditions

The combination of our past approach that has placed greater emphasis on surface water; our inadequate management of groundwater - I am informed that there are only 310 monitoring points for groundwater; and the insufficient numbers of hydro-geologists in the country has contributed to this lack of sufficient knowledge of this critical water resource. It has also allowed a situation where unscrupulous land users abuse the groundwater to the detriment of the environment, to their neighbour's detriment, and other users.

South Africa's National Water Act is internationally recognized as one of the most progressive pieces of legislation governing the management of water resources as a renewable natural resource. This Act is founded on the vision of Government for a transformed South African society, a society where every person has the opportunity to lead a dignified and healthy life and to participate in productive economic activity. The Act is founded on the three fundamental principles of equity, sustainability and efficiency. To fully take forward the intentions of this Act, we need to better utilise our groundwater as a means to supplying rural communities in particular with clean drinking water, and we should be asking ourselves: how we can utilize groundwater to assist our people to climb the water ladder and have access to higher levels of service? And how can ground water contribute to our target of addressing the remaining backlog in water supply and access to water for all?

Ladies and Gentlemen, the knowledge and understanding of our groundwater resources is very important if we are going to increasingly utilise this resource. For example, what would happen if we went ahead and built hundreds of small groundwater schemes – would they fail during the first major drought? Or become polluted in just a few years? All the things that lie in your field of expertise, like appropriate monitoring, early warning systems, water conservation, and proper protection of each water source – all these areas would need to be incorporated into any programme that is implemented and addressed systematically.

We also cannot ignore what is already happening, where at a local government level groundwater is being utilised by individual municipalities to service their water needs. We therefore have possibly hundreds of managers at district and local municipality, as well as at community level who need to be capacitated and empowered. We have also seen what can go wrong when the groundwater being used by poor communities

gets contaminated such as in Delmas. It is clear that we need a measured and comprehensive response to how we deal with groundwater use by municipalities.

Programme director, South Africa is obviously not alone in this challenge of effective utilisation of water and provision of water to its people; the World Bank in its report of October 2006, entitled 'Sustainable Development of Africa's Water Resources' describes Sub-Saharan Africa as a vast region which sees too little water, or too much, in the wrong place, or at the wrong time. In addition to challenges such as water stress and access, there are water related challenges such as poverty, health, and food security; with the report going on to state that while water and water systems are integrated resources, the human response in development efforts is often not integrated.

Despite South Africa having taken Integrated Water Resources Management as a guiding principle, this statement by the World Bank still holds some truth for us. For example, it was recently pointed out to me that there is an important relationship between wetlands and groundwater recharge, pointing to further motivation for the need to rehabilitate and restore our wetlands; yet within my Department I see still some disconnect between the work that we are doing to rehabilitate wetlands and the work we are doing in groundwater.

It has also been pointed out that in our approach to IWRM there are still some gaps in the responsibility of managing groundwater. Water resources can only be successfully managed if the natural, social, economic and political environments in which water occurs and used are all taken into account. An integrated approach to the management of water resources is therefore required in order to maximize the economic and social benefits in an equitable manner without compromising the sustainability of ecosystems.

Going forward we are establishing Catchment Management Agencies (CMAs), a core institution in our approach to IWRM. The question we need to ask is whether we should institutionalise groundwater as part of IWRM and in the institutions where the IWRM will be practiced; or should groundwater be treated separately. If we do institutionalise groundwater as part of the work of CMAs then what will this mean in terms of policy, planning, development, protection of groundwater, and monitoring and assessment - so that it is done comprehensively and not left to chance? There are those who argue that groundwater as part of the IWRM can do many things for us, while I am sure there are those who offer a strong counter position. Either way the law is very clear that we should always strive to balance water use with protection.

Programme director, with the challenges faced by other African countries in dealing with the provision of water and sanitation (in line with the Millennium Development Goals) groundwater has taken on increasing prominence. This importance was highlighted at a recent African Ministers' Council on Water (AMCOW) meeting held in Brazzaville earlier this year. In recognising groundwater's strategic importance for poverty alleviation and socio-economic development in Africa it was noted that despite this importance, it has remained a poorly understood and managed resource. AMCOW responded with two very practical directions:

- Firstly, to promote the institutionalization of groundwater management by river basin organizations; and
- Secondly, to create synergy with the Rural Water Supply and Sanitation Initiative (RWSSI) to ensure groundwater's inclusion in resource assessment and the sustainable management of groundwater resources.

And very significantly, as the main follow-on from Brazzaville, AMCOW is presently establishing a Commission on Groundwater Management in Africa to direct and co-ordinate a systematic, continent-wide thrust towards its sustainable utilisation.

To conclude, ladies and gentlemen, in a situation characterised by climate variability and resultant high surface water evaporation rates, groundwater will play an increasingly crucial role in supporting our future water needs, ensuring food security, and achieving greater equity amongst water users. Already in some areas groundwater plays a critical role, not only in meeting basic needs of the poor and the marginalised, but also as the most cost effective and reliable resource in arid areas of the country, especially during drought periods.

I have raised a number of questions in my address today and some of you may already have these answers; and other issues that I raised could be tackled during the deliberations at this Conference, or could point us in the right direction so we can have greater understanding of how better we can sustainably utilise our groundwater resources. Some of the solutions might already lie out there but require intense discussions by those involved in this area but may also require other disciplines, such as social scientists or economists.

Our approach to using groundwater cannot be addressed in a piece-meal way, and requires a new vision and a strategic approach in which Government, the Private Sector, academic institutions and civil society will need to work together.

I wish you a successful conference and I look forward to your inputs.

I thank you.