

Groundwater to Tap water - a municipal focus Lessons learnt from symposium

The Groundwater Division of the Geological Society of South Africa and the NWU hosted a symposium in Potchefstroom on 15-16 October 2012. The focus was on the use of groundwater by municipalities and aimed to share new knowledge on the topic of groundwater and municipalities, as well as, to allow for multi-stakeholder panel discussions mainly between researchers, groundwater practitioners and municipal officials.

Groundwater is the key component of the water cycle and focus has been placed in gaining knowledge concerning the resource, and stressing the importance thereof. Around 2000 million m³ of groundwater is currently being used by South Africans per annum. Groundwater is the main source of water for many rural communities, towns and even forms part of the water supply for cities such as Pretoria and Johannesburg.

Both hydrogeologists and municipal employees were in agreement that such a platform as the symposium is not only essential but also very valuable to support the sustainable development of groundwater resources in the country.

MAIN MESSAGES

It is of critical significance to appoint personnel with the required skills to deal with water resource management and co-operative governance. Especially in the geo-hydrological complex area of the Mooi River valley a better than average level of co-operative governance between all concerned actors is essential to guarantee sustainable potable water supply and the IWRM of it all in the area.

Capacitate municipal officials, political office-bearers and involved stakeholders with the basic knowledge and skills on Integrated Water Resources Management (IWRM)

Identify and eliminate potable water leaks, losses and theft of water services equipment

Develop conjunctive use of surface- and groundwater.

E Nealer, NWU

Groundwater awareness need to be raised on different levels with a top-down approach from funding entities to implementing agents, project managers, municipalities, community leaders and finally and most importantly - community members.

Sustainability of a groundwater supply project is largely determined by social, political, structural and economical factors. An understanding of these factors is critical to understand

and implement effective groundwater development, management and intervention programmes.

Jan Myburgh, AGES

Groundwater monitoring generally enables proper management.

Monitoring has additional benefits eg. water balance studies, EIAs and modelling

A balanced perspective must be created because many problems exist at DM level: high staff turn-over, lack of education, not a priority, insufficient budget,

Enthusiastic input from government and consultants is essential

Private sector involvement should also be considered

Julian Conrad, GEOSS

There is dolomite within Tlokwe City Council, and positive action must be taken to manage the risk.

Groundwater management and surface water management, as an integrated water management approach should be the key component of the project.

Laws Mohlomi, Tlokwe City Council

Groundwater AND surface water conjunctive use for municipalities

It is in the interest of municipalities, for the effective and efficient supply of potable water to consumers, to have groundwater developed as a water supply source, even when surface water supply is in place

The sustainability of water supply is highly dependent on the capacity to manage the supply infrastructure AND the water resource.

Anton Jones, Free State DWA Office

LESSONS LEARNT

Plenty success stories were shared from regions that attended the symposium. The following main lessons were learnt at the end of the 2-day symposium:

- Education and awareness on groundwater and groundwater management for local and district municipalities, water engineers and water users are needed.
- Various examples of success stories about groundwater use, monitoring and management at municipalities prove that groundwater is a feasible and reliable option of water supply.

This symposium was the first step (drop) on the road (tap) to a new way of thinking about and managing groundwater sustainably on a local scale.

Report Marlese Nel 06/12/2012